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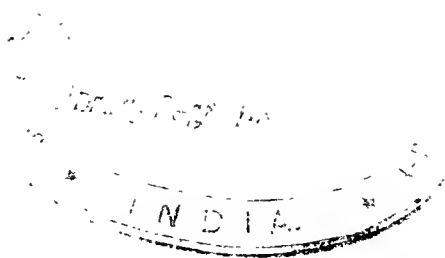
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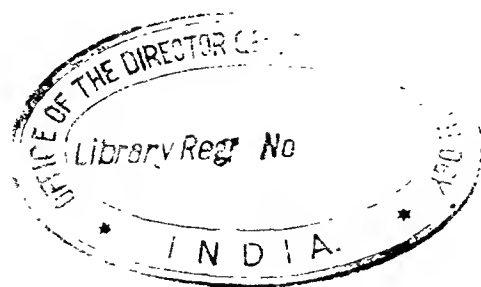
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THE JOURNAL
OF
HELLENIC STUDIES



THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

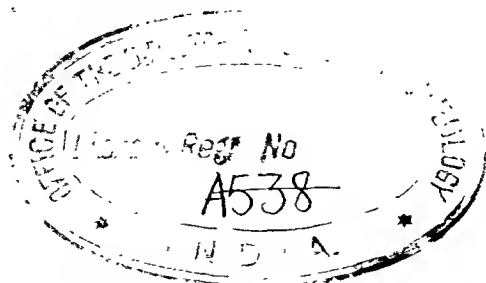
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OF

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J. H. S.



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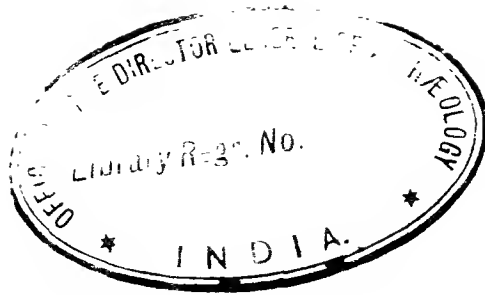
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CONTENTS.

	PAGE
Rules of the Society	ix
List of Officers and Members	xv
Proceedings of the Society, 1900-1901	xxxiii
Additions to the Library	xlvi
ANDERSON (J. G. C.) ... A New Hittite Inscription	322
BOSANQUET (R. C.) ... Archaeology in Greece, 1900-1901.	334
BROOKS (E. W.) ... Arabic Lists of the Byzantine Themes...	67
EVANS (A. J.) Mycenaean Tree and Pillar Cult and its Mediter- ranean Relations (Plate V.)	99
FOAT (F. W. G.) On Old Greek Tachygraphy (Plate XVIII.)... . .	238
FURTWÄNGLER (A.) ... Ancient Sculptures at Chatsworth House (Plates VIII.-XVII.)	309
GARDNER (E. A.) ... The Greek House	293
GARDNER (P.) A New Pandora Vase (Plate I.)	1
HOGARTH (D. G.) and WELCH (F. B.) ... Primitive Painted Pottery in Crete (Plates VI., VII.)	78
KABBADIAS (P.) ... The Recent Finds off Cythera	205
MILNE (J. G.) ... Greek Inscriptions from Egypt	275
MUNRO (J. A. R.) Roads in Pontus, Royal and Roman (Plate IV.) .. .	52
„ „ Gleanings from Mysia	229
NILSSON (M. P.) The Σχῆμα Τριώνυς in the Erechtheion	325
ROUSE (W. H. D.) The Double Axe and the Labyrinth	268
SMITH (A. H.)... Gavin Hamilton's Letters to Townley	306
TARN (W. W.) Patrocles and the Oxo-Caspian Trade Route	10
WALDSTEIN (C.) The Argive Hera of Polycleitus (Plates II., III.)... .	30
YOUNG (Sir G.) Two Notes on Sophocles	45
Index of Subjects	355
Greek Index	364

LIST OF PLATES.

I.	The Birth of Pandora.	Vase in the Ashmolean Museum.
II.	The Hera of Polycleitus.	Head in the British Museum.
III.	“ “ “	Head in the British Museum and Coins
	of Argos, etc.	
IV.	Map of Pontus	
V.	Fresco representing Façade of Mycenaean Temple, from Palace at Knossos.	
VI., VII.	Primitive Painted Cretan Ware.	
VIII.	Herm at Chatsworth.	
IX., X.	Head of Alexander at Chatsworth.	
XI., XII.	Head of Hermes at Chatsworth.	
XIII.	Statue of Apollo at Chatsworth.	
XIV.	Portrait Statue at Chatsworth.	
XV.	Portrait Group at Chatsworth.	
XVI.	Female Bust at Chatsworth.	
XVII.	Portrait Bust at Chatsworth.	
XVIII.	Waxen Book in the British Museum.	

LIST OF ILLUSTRATIONS IN THE TEXT.

	PAGE
Vase in the Ashmolean Museum (Birth of Pandora)	3
Sketch Map of the Oxo-Caspian Region	11
Fragment of Marble Sema from the Argive Heraeum	42
Tetracotta Head from the Argive Heraeum	43
Coins of Elis with Head of the Argive Hera (British Museum)	44
Sketch Map of the Byzantine Themes in the Ninth Century A.D.	68
Dove-vase (Knossos)	79
Fragments of Pottery (Knossos)	81
Fragment of Pottery (Knossos)	83
Vase with Corn-ears and Grapes in Relief (Knossos)	84
Three-handled Vases (Knossos)	85
One-handled Jars (Knossos)	86
Two-handled Vases (Knossos)	87
Neckless two-handled Jar (Knossos)	88
Pedestal-bowl (Knossos)	88
Bowl with Fluted under-surface (Knossos)	89
Fragment of Bowl with Ridge-ornament (Knossos)	90
Small Jars (Knossos)	90
Small one-handled Cup (Knossos)	90
Small two-handled Cup (Knossos)	91
Spirally-fluted Cup (Knossos)	91
Flat-handled Cup (Knossos)	91
Fluted Jar (Knossos)	91
Lamplike Object (Knossos)	92
Pedestal of Vase (?) (Knossos)	92
Spout of Vase (Knossos)	93

CONTENTS.

vii

Potsherd of Kamares Ware (Phylakopi)	94
" " " " " " " " " " " " " " " " " " " "	95
Potsherds with incised Ornament	96
Kamares Potsherd with primitive painted Ornament	97
Gem with Daemons watering Palms (Vapheio Tomb)	101
Fragment of Steatite Pyxis (Knossos)	103
Double Axe with Horns of Consecration between Bulls' Heads with similar Axes on Vase from Old Salamis (British Museum)	107
Gold Signet from Akropolis Treasure (Mycenae)	108
Pillar of the Double Axes (Knossos)	110
Pillar Shrines and Votaries on Vase Fragment from Curium (British Museum)	112
Baetylic Table of Offering from Diktæan Cave (restored)	114
Baetylic Cones and Offering Slab on Hittite Seal...	115
Small Baetylic Altar from Cyrenaica (British Museum)	115
Baetylic Table as Base for Sacral Lions on Cretan Gem...	115
Baetylic Altar on Coin of Cretan Community...	116
Impressed Glass Plaques with Daemons pouring Libations (Mycenae)	117
Figurine of Bronze (Cave of Hermes Krauaïos)	125
" Silver (Nezero, Thessaly)	126
Infant and Horned Sheep on Clay Impression of Gem (Knossos)... . .	129
Fresco with Horns of Consecration on Sanctuary Wall (Knossos)	136
Horned Cult Object of Pottery (Idæan Cave)...	136
Altar with Horned Cult Object, on Stele of Salm (Louvre)	137
Coin of Byblus with Cone of Astarte in Temenos (British Museum)	138
Carthaginian Pillar Shrine on Stele (Nora, Sardinia)	139
Group of Sacred Pillars on Mycenaean Vase from Haliki	139
Worship of Group of Pillars on Cylinder (Mycenae)	141
Worship of Group of Trees on Crystal Lentoid (Idæan Cave)	142
Tree Trinity of Min (Stele in Ashmolean Museum)	143
Sacred Column on Stele (Carthage Museum)	144
Egyptian Palmette Pillars and Rayed Pillars of Cyprus	149
Nathoric Uraeus Pillar and Analogies	150
Sacred Tree and Wild Goats on Lentoid Gem (Mycenae)	154
Sacred Palm and Wild Goat on Lentoid Gem (Palaeokastro, Crete)	154
Tree-Pillar and Animals on Lentoid Gem (Goufas, Crete)	154
Fleur-de-lys Pillar and Sphinxes on Gold Ring (Mycenae)	155
Pillar-Tree and Young Bulls on Crystal Signet (Mycenae)	156
Tympanum of Lions' Gate, Mycenae	157
Pillar with Griffin Supporters on Lentoid Gem (Mycenae)	158
Double-bodied Kriosphinx on Lentoid Gem (Mycenae)	159
Double-bodied Lion on Lentoid Gem (Mycenae)	159
Lions' Gate Type on Gold Signet (Mycenae)	159
Lions' Gate Type on Lentoid Gem (Zéro, Crete)	160
Confronted Lions with Fore-feet on Base, on Lentoid Gem (Crete)	161
Lion Supporters of Egyptian Solar Disk	162
Male Divinity between Lions, on Lentoid Gem (Kydonia, Crete)... . .	163
Female Divinity between Lions, on Amygdaloid Gem (Mycenae)... . .	164
Seated Goddess between Lions on Lentoid Ring-Stone (British Museum)	165
Dæmon between Lions on Lentoid Gem (Mycenae)	168
Dual Pillar Worship on Cypro-Mycenaean Cylinder (Salamis)	169
Dual Pillar Worship on Gold Signet (Knossos)	170
Double Representations of Rayed Pillars, on Tabloid Bead Seal (Old Salamis)	173
Rayed Shield-bearing God on Sarcophagus (Milato, Crete)	174
Armed God and Seated Goddess on Electrum Signet (Mycenae)	175
Religious Scene on Gold Signet (Vapheio Tomb)	176

CORRIGENDA.

P. 111, ll. 13, 12 from bottom. *For* 'Enkomi (Old Salamis)' *read* 'Curium.'

P. 112, Fig. 6. *For* 'Old Salamis' *read* 'Curium.'

P. 127, l. 12 from bottom. *For* 'object as its possession' *read* 'object of its possession.'

P. 140, l. 9 from bottom. *For* 'lentoid intaglio' *read* 'cylinder.'

P. 152, l. 22. *For* 'Ecbani' *read* 'Heabani.'

P. 181, l. 7. *For* 'human divinity' *read* 'departed human being.'

RULES

OF THE

Society for the Promotion of Hellenic Studies.

I. THE objects of this Society shall be as follows:—

I. To advance the study of Greek language, literature, and art, and to illustrate the history of the Greek race in the ancient, Byzantine, and Neo-Hellenic periods, by the publication of memoirs and unedited documents or monuments in a Journal to be issued periodically.

II. To collect drawings, facsimiles, transcripts, plans, and photographs of Greek inscriptions, MSS., works of art, ancient sites and remains, and with this view to invite travellers to communicate to the Society notes or sketches of archæological and topographical interest.

III. To organise means by which members of the Society may have increased facilities for visiting ancient sites and pursuing archæological researches in countries which, at any time, have been the sites of Hellenic civilization.

2. The Society shall consist of a President, Vice-Presidents, a Council, a Treasurer, one or more Secretaries, and Ordinary Members. All officers of the Society shall be chosen from among its Members, and shall be *ex officio* members of the Council.

3. The President shall preside at all General, Ordinary, or Special Meetings of the Society, and of the Council or of any Committee at which he is present. In case of the absence of the President, one of the Vice-Presidents shall preside in his stead, and in the absence of the Vice-Presidents the Treasurer. In the absence of the Treasurer the Council or Committee shall appoint one of their Members to preside.

4. The funds and other property of the Society shall be administered and applied by the Council in such manner as they shall consider most conducive to the objects of the Society: in the Council shall also be vested the control of all publications issued by the Society, and the general management of all its affairs and concerns. The number of the Council shall not exceed fifty.

5. The Treasurer shall receive, on account of the Society, all subscriptions, donations, or other moneys accruing to the funds thereof and shall make all payments ordered by the Council. All cheques shall be signed by the Treasurer and countersigned by the Secretary.

6. In the absence of the Treasurer the Council may direct that cheques may be signed by two members of Council and countersigned by the Secretary.

7. The Council shall meet as often as they may deem necessary for the despatch of business.

8. Due notice of every such Meeting shall be sent to each Member of the Council, by a summons signed by the Secretary.

9. Three Members of the Council, provided not more than one of the three present be a permanent officer of the Society, shall be a quorum.

10. All questions before the Council shall be determined by a majority of votes. The Chairman to have a casting vote.

11. The Council shall prepare an Annual Report, to be submitted to the Annual Meeting of the Society.

12. The Secretary shall give notice in writing to each Member of the Council of the ordinary days of meeting of the Council, and shall have authority to summon a Special and Extraordinary Meeting of the Council on a requisition signed by at least four Members of the Council.

13 Two Auditors, not being Members of the Council, shall be elected by the Society in each year.

14. A General Meeting of the Society shall be held in London in June of each year, when the Reports of the Council and of the Auditors shall be read, the Council, Officers, and Auditors for the ensuing year elected, and any other business recommended by the Council discussed

and determined. Meetings of the Society for the reading of papers may be held at such times as the Council may fix, due notice being given to Members.

15. The President, Vice-Presidents, Treasurer, Secretaries, and Council shall be elected by the Members of the Society at the Annual Meeting.

16. The President and Vice-Presidents shall be appointed for one year, after which they shall be eligible for re-election at the Annual Meeting.

17. One-third of the Council shall retire every year, but the Members so retiring shall be eligible for re-election at the Annual Meeting.

18. The Treasurer and Secretaries shall hold their offices during the pleasure of the Council.

19. The elections of the Officers, Council, and Auditors, at the Annual Meeting, shall be by a majority of the votes of those present. The Chairman of the Meeting shall have a casting vote. The mode in which the vote shall be taken shall be determined by the President and Council.

20. Every Member of the Society shall be summoned to the Annual Meeting by notice issued at least one month before it is held.

21. All motions made at the Annual Meeting shall be in writing and shall be signed by the mover and seconder. No motion shall be submitted, unless notice of it has been given to the Secretary at least three weeks before the Annual Meeting.

22. Upon any vacancy in the Presidency, occurring between the Annual Elections, one of the Vice-Presidents shall be elected by the Council to officiate as President until the next Annual Meeting.

23. All vacancies among the other Officers of the Society occurring between the same dates shall in like manner be provisionally filled up by the Council until the next Annual Meeting.

24. The names of all candidates wishing to become Members of the Society shall be submitted to a Meeting of the Council, and at their next Meeting the Council shall proceed to the election of candidates so proposed: no such election to be valid unless the candidate receives the votes of the majority of those present.

25. The Annual Subscription of Members shall be one guinea, payable and due on the 1st of January each year ; this annual subscription may be compounded for by a payment of £15 15s., entitling compounders to be Members of the Society for life, without further payment. All Members elected on or after January 1, 1894, shall pay on election an entrance fee of one guinea.

26. The payment of the Annual Subscription, or of the Life Composition, entitles each Member to receive a copy of the ordinary publications of the Society.

27. When any Member of the Society shall be six months in arrear of his Annual Subscription, the Secretary or Treasurer shall remind him of the arrears due, and in case of non-payment thereof within six months after date of such notice, such defaulting Member shall cease to be a Member of the Society, unless the Council make an order to the contrary.

28. Members intending to leave the Society must send a formal notice of resignation to the Secretary on or before January 1 ; otherwise they will be held liable for the subscription for the current year.

29. If at any time there may appear cause for the expulsion of a Member of the Society, a Special Meeting of the Council shall be held to consider the case, and if at such Meeting at least two-thirds of the Members present shall concur in a resolution for the expulsion of such Member of the Society, the President shall submit the same for confirmation at a General Meeting of the Society specially summoned for this purpose, and if the decision of the Council be confirmed by a majority at the General Meeting, notice shall be given to that effect to the Member in question, who shall thereupon cease to be a Member of the Society.

30. The Council shall have power to nominate British or Foreign Honorary Members. The number of British Honorary Members shall not exceed ten.

31. Ladies shall be eligible as Ordinary Members of the Society, and when elected shall be entitled to the same privileges as other Ordinary Members.

32. No change shall be made in the Rules of the Society unless at least a fortnight before the Annual Meeting specific notice be given to every Member of the Society of the changes proposed.

RULES FOR THE USE OF THE LIBRARY

AT 22, ALBEMARLE STREET.

I. THAT the Library be administered by the Library Committee, which shall be composed of not less than four members, two of whom shall form a quorum.

II. That the custody and arrangement of the Library be in the hands of the Librarian and Assistant-Librarian, subject to the control of the Committee, and in accordance with Regulations drawn up by the said Committee and approved by the Council.

III. That all books, periodicals, plans, photographs, &c., be received by the Librarian, Assistant Librarian or Secretary and reported to the Council at their next meeting.

IV. That every book or periodical sent to the Society be at once stamped with the Society's name.

V. That all the Society's books be entered in a Catalogue to be kept by the Librarian, and that in this Catalogue such books, &c., as are not to be lent out be specified.

VI. That, except on Christmas Day, Good Friday, and on Bank Holidays, the Library be accessible to Members on all week days from eleven A.M. to six P.M. (Saturdays, 11 A.M. to 2 P.M.), when either the Assistant-Librarian, or in her absence some responsible person, shall be in attendance. Until further notice, however, the Library shall be closed for the vacation from July 20 to August 31 (inclusive).

VII. That the Society's books (with exceptions hereinafter to be specified) be lent to Members under the following conditions:—

- (1) That the number of volumes lent at any one time to each Member shall not exceed three.
- (2) That the time during which such book or books may be kept shall not exceed one month.
- (3) That no books be sent beyond the limits of the United Kingdom.

VIII. That the manner in which books are lent shall be as follows:—

- (1) That all requests for the loan of books be addressed to the Librarian.
- (2) That the Librarian shall record all such requests, and lend out the books in the order of application.
- (3) That in each case the name of the book and of the borrower be inscribed, with the date, in a special register to be kept by the Librarian.
- (4) Should a book not be returned within the period specified, the Librarian may reclaim it.

- (5) All expenses of carriage to and fro shall be borne by the borrower.
- (6) All books are due for return to the Library before the summer vacation.

IX. That no book falling under the following categories be lent out under any circumstances :—

- (1) Unbound books.
- (2) Detached plates, plans, photographs, and the like.
- (3) Books considered too valuable for transmission.
- (4) New books within one month of their coming into the Library.

X. That new books may be borrowed for one week only, if they have been more than one month and less than three months in the Library.

XI. That in the case of a book being kept beyond the stated time the borrower be liable to a fine of one shilling for each week after application has been made by the Librarian for its return, and if a book is lost the borrower be bound to replace it.

The Library Committee.

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Assistant Librarian, MISS FANNY JOHNSON, to whom, at 22, Albemarle Street, applications for books may be addressed.

SESSION 1901—1902.

General Meetings will be held in the Rooms of the Royal Asiatic Society, 22, Albemarle Street, London, W., for the reading of Papers and for Discussion, at 5 P.M. on the following days :—

1901.
 Thursday, November 7th.
 1902.
 Thursday, February 27th.
 Thursday, May 8th.
 Thursday, June 26th (Annual)

The Council will meet at 4.30 p.m. on each of the above days.

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Adam, James, Emmanuel College, Cambridge.

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 The University Library of State of Missouri, *Columbia, Missouri, U.S.A.*
 The Public Library, *Detroit*.
 The Royal Museum of Casts, *Dresden*.
 †The Library of Trinity College, *Dublin*.
 The National Library of Ireland, *Dublin*.
 The King's Inns Library, *Dublin*.
 The Royal Irish Academy, *Dublin*.
 The University College, *Dundee*.
 The Durham Cathedral Library, *Durham*
 †The Advocates' Library, *Edinburgh*
 The Sellar and Goodhart Library, *University, Edinburgh*.
 The University Library, *Erlangen*.
 The University Library, *Freiburg im Baden, Germany* (Prof. Stempf).
 The Philologische Seminar, *Giessen*.
 The University Library, *Glasgow*.
 The Ducal Library, *Gotha* (Dr. W. Pertsch).
 The University Library, *Gottingen*.
 The Royal University Library, *Greifswald*.
 The Dartmouth College Library, *Hanover, U.S.A.*
 The School Library, *Harrow, N.W.*
 The University Library, *Heidelberg* (Dr. Zangmeister).
 The State University of Iowa, *Iowa, U.S.A.*
 The Cornell University Library, *Ithaca, N.Y.*
 The University Library, *Jena*.
 The Royal and University Library, *Königsberg*.
 The University of Kansas, *Lawrence, U.S.A.*
 The Leeds Library, *Commercial Street, Leeds*.
 The Public Library, *Leeds*.
 The Bibliothèque Universit  , 3, *Rue Jean Bart, Lille, Nord*.
 The Free Library, *Liverpool*.
 The University College, *Liverpool*
 †The British Museum, *London, W.C.*

- The Department of Greek and Roman Antiquities, *British Museum, London, W.C.*
 The Athenaeum Club, *Pall Mall, London, S.W.*
 The Burlington Fine Arts Club, *Savile Row, London, W.*
 The Library of St. Paul's School, *West Kensington, London, W.*
 The London Library, *St. James's Square, London, S.W.*
 The Reform Club, *Pall Mall, London, S.W.*
 The Royal Institution, *Albemarle Street, London, W.*
 The Royal Societies Club, 63, *St. James's Street, S.W.*
 The Library, *Westminster School, London, S.W.*
 The Oxford & Cambridge Club, Pall Mall, c/o Messrs. Harrison & Sons, 59, *Pall Mall, W.*
 The Foreign Architectural Book Society (T. H. Watson, Esq.), 9, *Nottingham Place, W.*
 The Ston College Library, *Victoria Embankment, London, E.C.*
 The College Library, *Dulwich, S.E.*
 The City Library, *Lowell, Mass., U.S.A.*
 The Bibliothèque Universitaire, *Palais Saint Pierre, Lyons.*
 The Whitworth Institute, *Manchester.*
 The Chetham's Library, *Hunts Bank, Manchester.*
 The Grammar School, *Manchester.*
 The Royal University Library, *Marburg.*
 The Public Library, *Melbourne, Victoria* (c/o Messrs. Melville, Mullen & Co.).
 The Library of the University of Milan, *Milan.*
 The Königliche Paulinische Bibliothek, *Münster, I.W.*
 The Royal Library, *Munich.*
 The Archaeological Seminary, *Munich.*
 The Forbes Library, *Northampton, U.S.A.*
 The Free Public Library, *Newark, New Jersey.*
 The Library of Yale College, *Newhaven.*
 The Free Public Library, *Jersey City, New Jersey, U.S.A.*
 The Public Library, *New York, U.S.A.*
 The New York State Library, *Albany, New York.*
 The Library of Columbia University, *New York.*
 The Hamilton College Library, *Clinton, New York.*
 The Metropolitan Museum of Art, *New York.*
 The Library of the College of the City of New York, *New York.*
 † The Bodleian Library, *Oxford.*
 The Junior Library, *Corpus Christi College, Oxford.*
 The Library of All Souls College, *Oxford.*
 The Library of Worcester College, *Oxford.*
 The Library of Balliol College, *Oxford.*
 The Library of Christchurch, *Oxford.*
 The Library of Exeter College, *Oxford.*
 The Library of St. John's College, *Oxford.*
 The Library of New College, *Oxford.*
 The Library of Oriel College, *Oxford.*
 The Library of Queen's College, *Oxford.*
 The Library of Trinity College, *Oxford.*
 The Library of University College, *Oxford.*
 The Library of Lincoln College, *Oxford.*
 The Union Society, *Oxford.*
 The University Galleries, *Oxford.*
 The Lake Erie College, *Painesville, Ohio, U.S.A.*
 The Bibliothèque de l'Institut de France, *Paris.*
 The Bibliothèque de l'Université de France, *Paris.*
 The Bibliothèque des Musées Nationaux, *Paris.*
 The Bibliothèque Nationale de Paris, *Paris.*
 The École Normale Supérieure, *Paris.*
 The Library Company, *Philadelphia.*
 The Library of the University of Pennsylvania, *Philadelphia, Pa., U.S.A.*
 The Vassar Library, *Poughkeepsie, N.Y.*
 The Archaeological Seminary, *The University, Prague* (Dr. Wilhelm Klein)
 The University Library, *Prague.*
 The Bibliothèque de l'Université, *Rennes.*
 The Library of Brown University, *Providence, Rhode Island, U.S.A.*
 The American School of Classical Studies, 2B, *via Gacta, Rome, Italy.*
 The Rossall Library, *Rossall, Fleetwood.*
 The School Reading Room, *Rugby*, care of Mr. A. J. Lawrence.
 The St. Louis Mercantile Library, *St. Louis, U.S.A.*
 The Mount Holyoke College, *South Hadley, Mass., U.S.A.*
 The Royal Library, *Stockholm.*

The Archæological Museum, *The University, Strassburg* (per Prof. Michaelis).
 The Imperial University and National Library, *Strassburg*.
 The Free Library, *Sydney, New South Wales*.
 The University Library, *Syracuse, New York*.
 The University Library, *Toronto*.
 The Library of the University of Illinois, *Urbana, Illinois*.
 The Library of Congress, *Washington, U.S.A.*
 The Library of Eton College, *Windsor*.
 The Bibliothèque Publique, *Winterthur*, (Dr. Imhoof Blumer).
 The Free Library, *Worcester, Mass., U.S.A.*
 The Williams College Library, *Williamstown, Mass., U.S.A.*

† Libraries claiming copies under the Copyright Act

LIST OF JOURNALS, &c., RECEIVED IN EXCHANGE FOR THE JOURNAL OF HELLENIC STUDIES.

American Journal of Archæology (Miss Mary H. Buckingham, 19, *Chestnut Street, Boston, U.S.A.*).
 Analecta Bollandiana, Société des Bollandistes, 14, *Rue des Ursulines, Bruxelles*.
 Annual of the British School at *Athens*.
 Bulletin de Correspondance Hellénique (published by the French School at *Athens*).
 Bullettino della Commissione Archeologica Comunale di Roma (Prof. Gatti, Museo Capitolino, *Rome*).
 Ephemeris Archaeologica, *Athens*.
 Jahrbuch of German Imperial Archaeological Institute, Corneliusstrasse No. 2, II., *Berlin*.
 Jahreshefte des Österreichischen Archäologischen Institutes, Turkenstrasse, 4, *Vienna*.
 Journal of the Anthropological Institute, *Hanover Square*.
 Journal of the Royal Institute of British Architects, 9, *Conduit Street, W.*
 Journal International d'Archéologie Numismatique (M. J. N. Svoronos, Musée National, *Athens*).
 Mélanges d'Histoire et d'Archéologie, published by the French School at *Rome*.
 Mittheilungen of the German Imperial Archaeological Institute at *Athens*.
 Mittheilungen of the German Imperial Archaeological Institute at *Rome*.
 Mnemosyne (care of Mr. E. J. Brill), *Leiden, Holland*.
 Neue Jahrbücher (c/o Dr. J. Ilberg), *Rosenthalgasse 3, II., Leipzig*.
 Numismatic Chronicle, 22, *Albemarle Street*.
 Philologus. Zeitschrift für das klassische Altertum (care of Dietrich'sche Verlags-Buchhandlung, *Göttingen*).
 Praktika of the Athenian Archaeological Society.
 Proceedings of the Hellenic Philological Syllogos, *Constantinople*.
 Publications of the Imperial Archaeological Commission, *St. Petersburg*.
 Revue Archéologique, *Paris* (per M. Georges Perrot, 45, *rue d'Ulm*).
 Revue des Études Grecques, Publication Trimestrielle de l'Association pour l'Encouragement des Études Grecques en France. *Paris*.
 Transactions of the Cambridge Philological Society and Journal of Philology.

SESSION 1900-1901.

THE First General Meeting was held on November 1, Mr. F. C. Penrose, V.P., in the chair.

Mr. Arthur Evans read a paper on 'The Tree and Pillar Cult of the Mycenaeans and its Mediterranean Relations,' with illustrations from recent Cretan finds. (*J.H.S.*, Vol. xxi. p. 99.) A discussion followed, in which Prof. Waldstein, Mr. L. R. Farnell, Mr. Hogarth, and others took part.

The Second General Meeting was held on February 28, Prof. P. Gardner, V.P., in the chair.

The Hon. Secretary (Mr. George Macmillan) read a communication from M. Cavvadias, the Greek Ephor-General of Antiquities, regarding a remarkable series of bronze and marble statues discovered by sponge-divers off the coast of Cythera. Particulars were given of some eight or nine figures, and photographs of them, kindly sent by M. Cavvadias, were thrown upon the screen. (*J.H.S.*, Vol. xxi. p. 205.)

A cordial vote of thanks was passed to M. Cavvadias for his valuable communication.—Mr. A. H. Smith made the following comments on the discovery and on the sculptures exhibited. As regards the circumstances of the find, when it was first reported it seemed not impossible that the wreck in question might be that of Lord Elgin's vessel, the *Mentor*, which was lost off Cythera. Though Lord Elgin assured the Committee of the House of Commons that all the sculptures had been recovered, there has been a persistent popular tradition to the contrary. When, however, large bronzes were recovered, it was manifest that Lord Elgin had nothing to do with the ship; and this was finally proved by the recovery of the anchor and other portions of an ancient vessel. With respect to the suggestion that this might be a vessel sent by Cassius from Rhodes, we had no information as to such a ship being wrecked. On the other hand, it is fairly certain that Sulla sent a ship, carrying the famous Centaur family of Zeuxis, and doubtless other works of art, which was lost near Cape Malea. As regards the several statues, the youthful figure, supposed to be of Polycleitan type, was remarkable for the absence of the mouth. It was, however, a well-known characteristic of bronzes to have an incised line round

the lips, as if it had once been usual to have lips inserted of a different material and colour. The second youthful figure, posed like the 'Doryphorus,' seemed to have its nearest parallel in the well-known Gallo-Roman bronze of Hermes in the British Museum, which has been variously assigned to the schools of Lysippus and Polycleitus. The action of the great bronze athlete seemed better explained as that of a man taking aim with a ball at a mark than as that of one holding a wreath or pouring a libation. The pose of the arm and the position of the fingers seemed alike unsuited to this interpretation. The marble figure was marked by a singular realism, which suggested the group of boys quarrelling over their knucklebones. The speaker could not accept the view of M. Cavvadias that the action of the figure was that of one looking to a distance. It was rather that of one looking intently at an adversary with whom he is about to grapple.—Mrs. S. A. Strong suggested that the statue alternatively described as a Hermes or an athlete might be the well-known 'Contionans' by Cephisodotus, the relative of Praxiteles. The position of the right arm seemed appropriate to an orator speaking.—Prof. Ernest Gardner read a paper on the Greek House. He said that the accepted view about the normal Greek house regards it as consisting of two courts—the men's court in front and the women's court behind—but that this view is not consistent either with the literary evidence or with the actual remains of Greek houses discovered at Delos and elsewhere. (*J.H.S.*, Vol. xxi. p. 293.)—A brief discussion followed, in which the Chairman, Mr. Penrose, and Mr. G. C. Richards took part.

The Third General Meeting was held on May 2, Prof. P. Gardner, V.P., in the chair.

Prof. Waldstein read a paper on 'A Discovery of Marbles related to the Pediments of the Parthenon.' The two marble statuettes in question have been in the Museum of Sculpture (Albertinum) at Dresden since 1892, when they were purchased from Rome along with a number of other works. They were not valued by the vendor, and were 'thrown in with the bargain.' If, as he hoped to show, these two statuettes were more or less direct reproductions of figures from the Parthenon pediment, their great importance would be manifest; for the one would help us in restoring in mind one of the finest works of sculpture (the river-god from the western pediment), and the other might present us with a figure from the eastern pediment (possibly Aphrodite) now missing, and no longer extant even when Carrey made his drawings. Furthermore, we should then for the first time have an instance of the treatment of the nude in female figures from the time of Pheidias. The lecturer then proceeded to demonstrate how the male statuette was manifestly a reproduction of the Cephissus or Ilissus from the western pediment, a modification of the upper part of the figure having taken place in the direction of the Theseus-Olympus from the eastern pediment. He then showed how, from the Cladeus from the Temple of Zeus at Olympia

(possibly even from Polygnotan pictures) onward, we had an unbroken series of this type down to late Roman times, and demonstrated this by numerous illustrations. This showed how common in antiquity was the custom of copying and adapting types from the decorative architectural sculptures of famous buildings and great artists, and that such copies were not restricted to the celebrated temple statues. The end of this series led us to Scopas and his Aphrodite Pandemos, and to more erect figures which had the attitude and composition of the other, the female statuette, half seated, half reclining on a rock, the upper part of the body being nude, the lower part draped. The drapery was drawn up behind the figure over the head, and was held by the upraised right arm. He showed by means of slides how the attitude and composition of this statue were immediately related to those from the Parthenon as well as to other works—all Attic and of the fifth century B.C. He proved by an examination of the back that the statuette was a pedimental figure, and by an examination of the drapery that it was most closely related in style to the Parthenon marbles. Finally he adduced the marble statuettes found at Eleusis, which were recognised as direct copies of the Parthenon pediments, to which this Dresden statuette corresponded both in dimensions and style. Though the two statuettes showed some points of difference, these were not greater than were to be found among the Parthenon marbles themselves; while he could not attach much weight to the difference in the actual marble. The statuettes came from the same source, were both pedimental, of similar dimensions, of the same Attic style of the fifth century B.C., were both directly related to the Parthenon, and ultimately pointed to Scopas; it would therefore be a most curious coincidence if they were not connected with one another.—The Chairman thanked Prof. Waldstein for his valuable and suggestive paper.—Sir H. Howorth thought that *prima facie* a strong case had been made out for the proposed identification.—Mr. A. H. Smith, while reserving his opinion, was inclined to agree that the authors of the statuettes had been unconsciously influenced by the figures in the Parthenon pediments.—Prof. S. H. Butcher dwelt upon the subtle sense of æsthetic form which was displayed by Prof. Waldstein in dealing with the *disjecta membra* of Greek art, and thought that the vein of inquiry opened up in the paper might lead to important results.

The Annual Meeting was held on June 27, Sir R. Jebb, President, and afterwards the Provost of Oriel, V.P., in the chair.

Before the reading of the Report, Sir Richard Jebb, President, spoke as follows:—

‘From the Report which will presently be read by the Secretary, you will see that our past session has been one of satisfactory activity in several

departments. It is especially gratifying to be able to record that the accession of new members to the Society has been considerably larger than in any recent year. But there is one topic to which the Report does not refer in detail, on which I would ask leave to touch. During the past year, the Society has been deprived by death of several distinguished members. Among our honorary members we have thus lost that accomplished scholar and archaeologist, Professor Kumanudes, of Athens. Into the vacancy thus created we have elected Professor Rufus Richardson, Director of the American School at Athens, in whose person we welcome a worthy representative of a kindred nation.

‘From the roll of our ordinary members, several distinguished names have been removed by death. We have lost the Marquis of Bute, to whose generosity the British School at Athens was largely indebted, and whose interesting address at one of the annual meetings of the subscribers to that School will be remembered by some who are present to-day. We have lost two eminent historians, Dr. Creighton, late Bishop of London, and Dr. Stubbs, late Bishop of Oxford; an eminent writer on ethics and political science, Prof. Henry Sidgwick; the accomplished scholar and teacher who lately was Headmaster of King Edward’s School, Birmingham, the Rev. A. R. Vardy; Prof. G. C. Warr, author of many valuable contributions to classical literature, who at the time of his death was engaged in a work designed to render the masterpieces of the Attic drama more fully intelligible to English readers; the Rev. Canon Edward Young, formerly Headmaster of Sherborne, whose compositions in Latin verse are among the happiest written in our time; Mr. Robert Alexander Neil, Fellow and Tutor of Pembroke College, Cambridge, University Reader in Sanskrit, and a classical scholar of rare learning and acumen, who for many years was a member of our Council. To the memory of all these we owe, and we render, a tribute of gratitude for cordial support and sympathy in the work of this Society.’

The Hon. Secretary (Mr. George Macmillan) then read the following Report on behalf of the Council :—

The Council have again to report a satisfactory session, during which the work of the Society has been actively carried on in its various departments.

Three General Meetings have been held, and have been well attended. Special interest was excited by the meeting on February 28, when through the courtesy of one of the Honorary Members of the Society, Monsieur P. Cavvadias, the Ephor-General of Antiquities in Greece, members had the privilege of hearing an account, illustrated by lantern slides, of the remarkable recovery of bronze and marble statues from the sea off the coast of Cythera. Monsieur Cavvadias’s paper on the subject appeared, with illustrations, in the last number of the *Journal*.

In the last Report it was intimated that, in accordance with the precedent set in the case of the excavations at Megalopolis, the full report of the very important discoveries made by members of the British School at Athens in the Island of Melos would be issued to members as a Supplementary Paper, practically taking the place of a volume of the *Journal*, although in order to preserve continuity it was intended to issue at the same time a single number of the *Journal*. In the course of the year, however, the Council have seen reason to modify this decision, and have now determined to publish the monograph on Phylakopi as a separate venture apart from the ordinary publications of the Society. Members will have the opportunity of purchasing the volume at about cost price, while it will be issued at a higher price to the general public. The reasons for this change of plan were two-fold: (1) that certain important and valuable papers offered to the *Journal* must have been either postponed or refused if the Society had had to bear the cost of the special monograph out of its ordinary revenue, and it did not seem desirable thus to hamper the operations of the Society; and (2) that on general grounds it was desirable that the cost of such monographs should be met by a special subscription. The Council trust that this decision, which was only taken after the whole question had been examined and reported upon by a Special Committee, may commend itself to the general body of members, and that the confidence thus shown in the general desire of members to promote one of the most important objects of the Society—the adequate publication of the results of excavation—may be justified by the sale to members of a sufficient number of copies of the monograph in question to ensure the Society against actual loss. It had been hoped that the volume might by this time have been ready for publication, but unforeseen delays have occurred in collecting and arranging the material, and it is not likely that publication can take place before January 1902. The usual two numbers of the *Journal* will be published in the course of the present year. Indeed, the first is already in the hands of members.

Reference was made last year to a scheme for reproducing in facsimile the Codex Venetus of Aristophanes, at the joint expense of this Society and of the Archaeological Institute of America. The work is now well advanced, and, as members will have learned from the prospectus recently issued, it is hoped that copies will be ready for subscribers in the course of the autumn. The price of the Facsimile will be £6 in a portfolio, or £6 6s. bound in half morocco, and it is hoped that subscribers will come forward promptly, so that the heavy expense incurred may be recouped without delay. A special account has been opened for this undertaking.

Members will be aware that the excavations begun in Crete last year by Mr. Arthur Evans, working with the help of the Cretan Exploration Fund, and by Mr. Hogarth, as Director of the British School at Athens, led to discoveries of startling interest and importance. Mr. Evans himself described the remarkable Palace at Knossos, with its wonderful wall-paintings and hoard of inscribed tablets, at the Annual Meeting of last

year, and fuller accounts have since appeared in the *Annual of the British School at Athens*; while other aspects of the subject have been dealt with in the valuable paper on 'Tree and Pillar Worship,' contributed by Mr. Evans to the last number of the *Journal of Hellenic Studies*. The extraordinary interest excited by these discoveries happily brought in contributions of upwards of £2000 to the Cretan Exploration Fund (including a second grant of £50 from this Society), so that Mr. Evans was enabled to proceed with the further excavation of the site of Knossos, where his labours have already been rewarded with continued success, while Mr. Hogarth, working at Kato Zakro, on the eastern coast of the island, has discovered a Mycenæan town, containing, within Cyclopean walls, a series of private houses in a remarkable state of preservation. At the same time, Mr. R. Carr Bosanquet, the new Director of the British School at Athens, has commenced upon the site of Praesos, at the eastern end of the island, excavations which are expected to yield valuable material for the study of the early civilisation in the Aegean, upon which the attention of scholars and archaeologists is now concentrated. There also interesting discoveries have been made, though belonging to a somewhat later period than was anticipated.

Some months ago the Society was invited by the University of Glasgow to send Delegates to the celebration of the 450th anniversary of the foundation of the University, which has recently been held in Glasgow. The invitation was cordially accepted by the Council, and Sir Richard Jebb, President, Mr. F. C. Penrose, Vice-President, and Mr. George Macmillan, Hon. Secretary, were chosen to represent the Society on this interesting occasion.

Library Report.

The work of the Library has continued to develop in a satisfactory manner during the past year. About 81 members in all have availed themselves of the various Library privileges, as compared with 70 in the previous Report. The number of visits paid to the Library was 236 (compared with 190) and the number of books borrowed by personal application or by post 199 (compared with 156).

The accessions of the year include a considerable number of books obtained in exchange for portions of the Society's stock of the *Hellenic Journal*. This has been effected to a larger extent than usual during the year under review, in which practically three sets of the Journal have been thus disposed of. It is therefore right to point out that these exchanges may be regarded as expenditure on the Library, additional to that shown in the accounts, since the amount that may ultimately be realized from the sale of back volumes is proportionately reduced.

The principal collection thus acquired is the series of pamphlets, separate copies, dissertations, and occasional writings, formed by the late Professor Overbeck, of Leipsic. When these tracts, which are still in course of arrangement, shall have been duly incorporated, the Society's Library will

be found to have been greatly strengthened in a branch of literature in which it has hitherto been conspicuously weak.

Among the other works acquired by exchange, the following may be mentioned :

Overbeck, *Griechische Kunstmythologie*, text and Atlas.

Renan, *Expédition de la Phénicie*.

Raoul Rochette, *Monuments Inédits*.

Leipziger Studien für classische Philologie.

The purchases of the year include Schultz and Barnsley, "Monastery of Saint Luke of Stiris," Jebb's Sophocles, and other works. The *Comptes Rendus* of the Paris *Académie des Inscriptions* has been added to the list of periodicals. The Society has also become a subscriber to the new *Thesaurus Linguae Latinae*.

The periodicals and books of reference deposited for some time in the Library by Miss Harrison, as reported in 1898, have now been removed. A certain part, however, of the collection—notably the *Archaeologische Zeitung* and several important works on vases—has been purchased, and is now permanently incorporated with the Library.

Thanks are due to the following donors of books :—M. Andropoulos, the Duke of Bedford, Mr. C. D. Cobham, Dr. E. Freshfield, Mr. G. F. Hill, Miss Hutchinson, M. Kavvadias, Mr. R. Proctor, Mr. St. Clair, Mr. Ph. Spiers, Mrs. S. A. Strong, Mr. A. Van Branteghem ; also to the Trustees of the British Museum, the Delegates of the Clarendon Press, Messrs. Macmillan & Co., and Messrs. Macmillan & Bowes ; also to Miss K. Raleigh, for a book deposited on loan.

Photographic Collection.

The stock of negatives, slides, and prints has increased steadily during the year. About 400 prints have been added to the collection, and about 150 negatives. Special mention should be made of a valuable set of negatives of Roman views, presented by a former benefactor of the collection, Mr. W. J. Stillman ; of a large collection of prints, chiefly of sculpture subjects, the gift of Mr. G. F. Hill ; and of a series of views in Arcadia and other parts of Greece, presented by Mr. W. Loring. Mr. J. L. Myres has added some slides and negatives to the sections dealing with early vases, and Mycenaean art. The proceeds of the sale and hire of slides show steady increase, and leave a satisfactory balance in hand, which is applied to the maintenance and enlargement of the collection.

There appears to be a considerable demand among lecturers on Greek literature and drama for views of localities such as Thebes and Argos, which are the subject of literary references, but lie somewhat off the beaten track of tourists and photographers. Members of the Society and others who possess suitable negatives of the less-frequented sites would confer a very substantial benefit on their colleagues if they would lend or deposit them on the customary terms set out in Rule 2.

The proposal as to the publication, for hire, of complete sets of slides, which was foreshadowed in last year's report, has now been adopted by the Council, and six sets of this kind will be available for use in the coming Session. They will consist of selected slides illustrating historical and archaeological topics which are commonly taught in schools and colleges, and will be lent not only to Members of the Hellenic Society, at the customary rate, but also to non-members engaged in Hellenic studies, at somewhat higher terms. Particulars of these sets may be obtained from the Assistant Librarian, on and after October 1st. There is every hope that this extension of the Collection will help to meet the great need which is found to exist of well selected illustrations of Hellenic subjects for the ordinary purposes of teaching.

Finance.

The Balance Sheet shows the present financial position of the Society. Ordinary receipts during the year were £1,037, against £960 during the financial year 1899-1900. The receipts from subscriptions, including arrears, amount to £646, against £643, and receipts from libraries, and for the purchase of back volumes, £179, against £163. Life subscriptions amounting to £78, donations £13 13s., and for lantern slides £30 have also been received. Other items of ordinary income show no change.

The ordinary expenditure for the year amounts to £716, against £690. Payments for rent £80, insurance £15, salaries £60, and sundry printing, postage, and stationery £61, are practically the same as in the preceding year; the cost of purchases for the Library shows £74, against £73. There has further been an expenditure of £44 on the photographic collection and lantern slides. The net cost of the *Journal*, Vol. XX., and Supplementary Paper No. 3, has amounted to £382 against £390. The usual grant of £100 was made to the British School at Athens, £50 to Professor Lewis Campbell as the third and last instalment of the promised contribution towards the new Platonic Lexicon, and £50 to the Cretan Exploration Fund. The balance carried forward at the close of the year under review amounts to £252, against £131 at the end of the previous financial year. The expenditure on the facsimile of the Codex Venetus of Aristophanes is shewn in a separate account.

Sixty-three new members have been elected during the year, while forty have been lost by death or resignation. The present total of subscribing members is 747, and of honorary members 23, the name of Professor Rufus B. Richardson, Director of the American School at Athens, having been added to the roll of honorary members in place of Professor Kumanudes, deceased.

Three new libraries have joined the list of subscribers, and three have stopped payment, making the number at the present time 142, or with the five public libraries 147.

Conclusion.

On the whole the general state of the Society may be regarded as highly satisfactory. Its activity during the past year has, in its several departments, been well maintained, and an even healthier sign is the accession of new members which is considerably larger than in any recent year. That this has not resulted in a larger net increase in the roll of membership is due to the unfortunate fact that it has again been found necessary to remove some twenty names of members who were some years behind with their subscriptions, and could not be induced to respond to the Treasurer's repeated applications. This falling away of lukewarm supporters, which increases the natural loss by death or resignation, still makes it incumbent upon all members to do their best to bring in fresh candidates, but this task should become easier as year by year the interest in Hellenic antiquity spreads more widely, while the privileges of membership are enhanced by judicious extension of the various aids to study and research.

The adoption of the Report was moved by the Provost of Oriel, and seconded by Prof. Seymour, of Yale, who welcomed the opportunity of bearing testimony to the excellent work done by the Society. The Report was unanimously adopted—The Hon. Secretary read a summary by Mr. Arthur Evans of the main results of his work at Knossos during the past season. The palace had proved to be far more extensive than he had first supposed, and recently, in its eastern quarter, had been made the remarkable discovery of three flights of stone stairs, one below the other leading down to a columnar hall with walls rising some twenty feet. The staircase was flanked above and below by a breastwork showing the sockets of the original wooden columns, so that with this double tier of colonnades the hall (which seems to have been partly hypæthral) must have presented somewhat the appearance of an Italian Renaissance palace. Even at Pompeii no such staircases one over the other have yet been brought to light. Of individual finds, mention was made of a magnificent draught-board of ivory plated with gold, of crystal plaques backed by silver and blue enamel, and of the lip of an alabastron finely engraved with the name and divine titles of Khyan, the Hyksos king, whose monuments are rare in Egypt itself. Other objects suggested connexion with Nubia and Babylonia. A further store of inscribed tablets had been found, and also additional wall-paintings, while of still higher interest, in their bearing on the history of ancient art, were fragments of human figures in painted stucco relief. The modelling of limbs and muscles, and the minute delineation of the veins, seemed to Mr. Evans more in keeping with the spirit of the Italian Renaissance than with classical antiquity. One male head was surmounted by a crown representing a succession of fleur-de-lis with an upright one in the centre.—Mr. Macmillan, as Treasurer of the

Cretan Exploration Fund, pointed out that it was now exhausted, and appealed for further subscriptions to enable Mr. Evans to complete his work. Prof. E. A. Gardner gave an account of a visit to the scene of the excavations at Knossos and of the collection of statuary discovered off Cythera.—The former President and Vice-Presidents were re-elected, and Dr. James Gow and Mr. F. E. Thompson were elected to vacancies on the Council.—The President of Trinity College, Oxford, gave some account of the present position of the British School at Rome.—The usual votes of thanks to the Auditors and to the Chairman closed the proceedings.

“THE JOURNAL OF HELLENIC STUDIES” ACCOUNT FOR THE YEAR ENDING 31ST MAY 1901.

	£	s.	d.	£	s.	d.
To Sales of Journal, July 1, 1899, to June 30, 1900 ..	66	19	5	170	7	7
“ Advertisements in Journal	11	16	9	49	13	0
“ Balance, to Cash Account ..	78	16	2	79	3	5
	381	16	11	94	15	10
				41	13	3
				25	0	0
				£460	13	1

CASH ACCOUNT.

	£	s.	d.	£	s.	d.
To Balance at 31st May, 1900 ..	130	7	10	80	0	0
“ Petty Cash	14	10½		15	0	0
“ Members’ Subscriptions, 1900—1901 ..	636	11	9	40	0	0
“ “ Arrears	9	16	0	20	0	0
“ “ Life Subscriptions						
“ “ Entrance Fees						
“ Library Subscriptions, 1900—1901 ..						
“ Back Volumes of Journal ..						
“ Donations, F. D. Mocatta, Esq.	3	3	0			
“ “ Miss E. C. Stevenson	10	10	6			
“ Dividends on New South Wales 3½ per cent. Stock—Oct. 1, 1900 ..	18	17	0			
“ “ April 1, 1901	18	17	0			
“ “ Corporation of Nottingham 3 per cent.—Nov. 1, 1900 ..	2	6	3			
“ “ May 1, 1901	2	6	3			
“ Library Account—Sales of Duplicates, Fines, &c.						
“ Lantern Slides Account						
“ Royalties on Sale of Photographs ..						
“ Sale of Electros						
To Balance at Bankers, 31st May, 1901 ..	249	8	8			
“ Petty Cash	2	4	11½			
	£1,168	10	10			
	£251	13	7½			

ARISTOPHANES FACSIMILE FUND.

	£	s.	d.	£	s.	d.
1900—June 13. American Archaeological Institute ..	100	0	0	80	0	0
1901—April 11. “ “ ..	200	0	0	13	10	0
“ “ “ “ ..				26	0	0
“ “ “ “ ..				180	10	0
Balance brought forward ..	£300	0	0	£300	0	0
	£180	10	0			

Balance brought forward ..

£180 10 0

We have examined this account, compared it with the vouchers and bankers’ book, and find it correct.

DOUGLAS W. FRESHFIELD, *Hon. Treasurer.*

25th June, 1901.

(ARTHUR JOHN BUTLER,

(STEPHEN SPRING-KICE,

Auditors.

A comparison with the receipts and expenditure of the last ten years is furnished by the following tables:—

ANALYSIS OF ANNUAL RECEIPTS FOR THE YEARS ENDING:—

	31 May, 1892	31 May, 1893	31 May, 1894	31 May, 1895	31 May, 1896	31 May, 1897	31 May, 1898	31 May, 1899	31 May, 1900	31 May, 1901
Subscriptions	£ 554	£ 564	£ 671	£ 678	£ 645	£ 617	£ 613	£ 598	£ 634	£ 636
Arrears	16	13	44	14	9	4	13	18	9	10
Life Compositions	126	95	79	50	63	15	...	32	63	78
Libraries and Back Vols.	233	161	186	122	117	126	118	122	163	179
Entrance Fees . . . . .	...	...	...	...	...	...	...	...	33	45
Dividends	37	39	43	43	43	43	43	43	43	42
Special Receipts—										
Mr. D. G. Hogarth (Alex- andria Grant Refunded)				..	30				..	..
Loan and sale of Lantern Slides	4	4	4	2	7	5		4	3	30
Clichés . . . . .	..	..	..	..	..	3	..	..	..	..
Library Receipts . . . . .	...	..	...	...	..	...	...	...	2	2
Royalty on and Sales of Photographs	5	2	2	1	1		2	...	2	1
Donations—										
F. D. Mocatta, Esq. . . . .	..	..	..	..	..	..	..	3	3	3
E. H. Egerton, Esq. . . . .	..	..	5	...	...	..	..	..	...	...
H. G. Hart, Esq. . . . .	..	..	..	..	..	..	..	..	5	...
Miss E. C. Stevenson . . . . .	..	...	...	..	..	..	..	...	...	11
Library, Mrs. Cohen	1			..	..	..	..	..	..	...
W. Arkwright, Esq.				..	..	3	..	..	...	..
	976	878	1,034	910	915	816	789	820	960	1,037
Balance from preceding year	255	239	259	211	169	340	360	201	61	131
	1,231	1,117	1,293	1,124	1,084	1,156	1,149	1,021	1,021	1,168

ANALYSIS OF ANNUAL EXPENDITURE FOR THE YEARS ENDING:—

	31 May, 1892	31 May, 1893	31 May, 1894	31 May, 1895	31 May, 1896	31 May, 1897	31 May, 1898	31 May, 1899	31 May, 1900	31 May, 1901
Rent	£ 35	£ 50	£ 73	£ 80	£ 80	£ 80	£ 80	£ 80	£ 80	£ 80
Insurance	11	11	11	15	15	15	15	15	15	15
Salaries	44	49	49	49	47	52	50	60	60	60
Library	8	41	75	96	39	94	93	61	73	74
Sundry Printing, Postage, and Stationery	41	71	49	49	46	29	45	32	58	61
Lantern Slides Account . . . . .	..						24	..	13	29
Photographs Account . . . . .					...	..	..	26	1	15
Cost of Journal (less sales)	610	532	475	441	394	346	516	536	390	382
Grants	125	100	185	225	100	180	125	150	200	200
Investments	100		158	..	..	..	..	..	..	..
Egypt Exploration Fund—1,100 copies of Mr. Hogarth's Report					23					..
Photo Enlargements, Albums,	18	4	4	..	..	...			..	..
	992	858	1,079	955	744	796	948	960	890	916
Balance	239	259	214	169	340	360	201	61	131	252
	1,231	1,117	1,293	1,124	1,084	1,156	1,149	1,021	1,021	1,168

LIST OF BOOKS AND PAMPHLETS

ADDED TO THE

LIBRARY OF THE SOCIETY FOR THE PROMOTION OF HELLENIC STUDIES

JUNE 1, 1900—JUNE 28, 1901*

This does not include Prof. Overbeck's collection of Tracts, described in the
Annual Report.

-
- Adamy (R.) *Architektonik der Hellenen.* 8vo. Hannover. 1882.
(Exchange.)
- Andropoulos (S) *Ἀπομνημονεύματα περὶ τῆς Ἑλληνικῆς ἐπιδαστάσεως.*
2 vols. 8vo. Athens. 1900. (Presented.)
- L'Architecture. Vol. 13. No. 33. [Fouilles de Delphes.] Folio.
Paris. Aug. 1900. (Presented.)
- Aristophanes. *Aristophanis Comoediae.* Vol. I, II. Edd. F. W.
Hall and W. M. Geldart (Script. Class. Bibl. Oxon.). 8vo.
Oxford. 1900, 1901. (Presented.)
- Berlin. *Königliche Museen. Beschreibung der Vasensammlung
im Antiquarium.* By A. Furtwaengler. 8vo. Berlin. 1885.
- Boehlau (J.) *Aus Ionischen u. Italischen Nekropolen.* 4to. Leipsic.
1898.
- British Museum Publications. (Mainly presented by the Trustees.)
- Dept. of Coins and Medals.*
- Guide. 8vo. 1901.
- Catalogue of Greek Coins of Lycaonia, Isauria, and Cilicia.
By G. F. Hill. 8vo. 1900.
- Dept. of Egyptian and Assyrian Antiquities.*
- Guide to First and Second Egyptian Rooms. 8vo. 1874.
- " " " " " " " " 8vo. 1898.
- Guide to Babylonian and Assyrian Antiquities. 8vo. 1900.

Dept. of Greek and Roman Antiquities.

- Guide to the Elgin Room. Parts I., II. 8vo. 1870-1.
 Guide to the Graeco-Roman Sculptures. Part I. 8vo. 1876.
 " " " " " " Part II. 8vo. 1879.
 Guide to the Department of Greek and Roman Antiquities.
 8vo. 1899.
 Catalogue of Sculpture. Vol. II. By A. H. Smith. 8vo.
 1900.
 Catalogue of Sculpture. Vol. I. Part 2. (Sculptures of
 the Parthenon.) 2nd ed. 8vo. 1900.
 Excavations in Cyprus. By A. S. Murray, A. H. Smith and
 H. B. Walters. Folio. 1900.
 Brunn (H. v.) Tracts. 8vo. Munich. 1870-82.
 Bury (J. B.) History of Greece to the death of Alexander the
 Great. 8vo. London. 1900. (Presented.)
 Cagnat (R.) Cours d'Épigraphie Latine. 3rd edition. 8vo. Paris.
 1898.
 Cicero. Scripta . . . Omnia. Ed. R. Klotz. 11 vols. 8vo. Leipsic.
 1851-63. (Exchange.)
 Cobham (C. D.) An attempt at a Bibliography of Cyprus. 4th
 edition. 8vo. Nicosia. 1900. (Presented.)
 Courbaud (E.) Le Bas-relief Romain à représentations historiques.
 8vo. Paris. 1899.
 Curtius (E.) and J. A. Kaupert. Karten v. Attika. Text. Pt. IX.
 Plates, Pt. IX. 2. 4to. Berlin. 1900.
 Dalton (R.) Views in Greece. Folio. London. 1751-3.
 Daremberg (Ch.) and E. Saglio. Dictionnaire des Antiquités grecques
 et romaines. Nos. 28-30. (—Lud.) 4to. Paris. 1900, 1901.
 Dittenberger (W.) Sylloge Inscriptionum Graecarum. 2nd ed. 3
 vols. 8vo. Leipsic. 1900, 1901.
 Dumont (A.) Peintures Céramiques de la Grèce propre. 4to. Paris
 1874. (Exchange.)
 Endt (J.) Beiträge zur Ionischen Vasenmalerei. 8vo. Prague.
 1899.
 Ephesus. Ausstellung v. Fundstücken aus Ephesos im Griechischen
 Tempel im Volksgarten. (Kunsthist. Sammlungen d. aller
 höchsten Kaiserhauses.) 8vo. pamph. Vienna. 1901.
 (Presented.)
 Fowler (W. Warde) City-State of the Greeks and Romans. 8vo.
 London. 1895.
 Foucart (P.) Associations Religieuses chez les Grecs, &c. 8vo.
 Paris. 1873.
 Freshfield (E.) Letter to the Right Hon. Lord Aldenham upon the
 subject of a Byzantine Evangelion. Folio. London. 1900.
 (Presented.)
 Gaspar (C.) Essai de Chronologie Pindarique. 8vo. Brussels. 1900.
 (Presented.)
 Gerhard (E.) Etruskische u. Kampanische Vasenbilder (Vases étrus-

- ques et campaniens du Musée Royal de Berlin). Folio. Berlin. 1843.
- Trinkschalen u. Gefässe. Vases et Coupes du Musée Royal de Berlin. 2 vols. Folio. Berlin. 1848-50.
- Griechische u. Etruskische Trinkschalen d. Königl. Museums zu Berlin. Folio. Berlin. 1840.
- Gesner (J. M., ed.) *Scriptores Rei Rusticae*. 4 vols. 8vo. Zweibrücken. 1787-88. (Exchange.)
- Grenfell (B. P.) and A. S. Hunt and D. G. Hogarth. *Egypt Exploration Fund: Fayûm Towns and their Papyri*. 4to. London. 1900.
- Hall (H. R. H.) *The Oldest Civilisation of Greece*. 8vo. London. 1901. (Presented.)
- Helbig (W.) *Strena Helbigiana sexagenario obtulerunt amici*. 8vo. Leipsic. 1900.
- Hoernes (M.) *Urgeschichte der bildenden Kunst in Europa*. 8vo. Vienna. 1898. (Exchange.)
- Hogarth (D. G., ed.) *Authority and Archaeology, sacred and profane*. 2nd edition. 8vo. London. 1899.
- Horace. H. Opera ed. E. C. Wickham. [Script. Class. Bibl. Oxon.] 8vo. Oxford. 1900. (Presented.)
- Hutchinson (W. M. L.) *Aeacus, a Judge of the Underworld*. 2 copies. 8vo. pamph. Cambridge. 1901. (Presented.)
- Jahn (O.) *Die Entführung der Europa*. 4to. Vienna. 1870. (Exchange.)
- Kabbadias (P.) *Ἱστορία τῆς Ἀρχαιολογικῆς Ἑταιρείας*. 8vo. Athens. 1900.
- Koepp (F.) *Über das Bildniss Alexanders d. Grossen* (52 Berlin. Winkelmannsprog.) 4to. Berlin. 1892. (Exchange.)
- Lethaby (W. R.) and H. Swainson. *The Church of Sancta Sophia, Constantinople, a Study of Byzantine Building*. 8vo. London. 1894.
- Louvre. *Catalogue des Vases Antiques de Terre Cuite*, by E. Pottier. Vol. II. 8vo. Paris. 1899.
- *Vases Antiques du Louvre*. 2^{me} Série. By E. Pottier. 4to. Paris. 1901.
- Luckenbach (H.) *Das Verhältniss der griechischen Vasenbilder zu den Gedichten d. epischen Kyklos*. 8vo. Leipsic. 1880.
- Magne (L.) *Le Parthénon*. 4to. Paris. 1895. (Exchange.)
- Martha (J.) *L'Art Etrusque*. 4to. Paris. 1889.
- Michel (C.) *Recueil d'Inscriptions grecques*. 4 vols. 8vo. Paris. 1897-1900.
- Munich. *Beschreibung der Vasensammlung in der Pinakothek zu München*, by O. Jahn. 8vo. Munich. 1854.
- Naples. *Die Vasensammlungen des Museo Nazionale zu Neapel*, by H. Heydemann. 8vo. Berlin. 1872.
- Ohnefalsch-Richter (M.) *Kypros, Bible and Homer*. 2 vols. Folio. London. 1893. (Deposited on loan.)

- Overbeck (J.) Griechische Kunstmythologie. Text, 3 vols. and atlas. 8vo. and folio. Leipsic. 1871-79. (Exchange.)
- Pauly. Real-Encyclopädie der Classischen Altertumswissenschaft. Ed. by G. Wissowa. IV. 1 (—Cornificius). 8vo. Stuttgart. 1900.
- Petrie (W. M. F.) Royal Tombs of the First Dynasty. 1900. Part I. (18th memoir of Egypt Exploration Fund). 4to. London. 1900.
- Pindar. Pindari Carmina, ed. O. Schroeder [Bergk (T.) Poetae Lyrici Graeci. 5th edition. I. 1.] 8vo. Leipsic. 1900.
- Plato. P. Opera, ed. J. Burnet. Vol. II. [Script. Class. Bibl. Oxon.] 8vo. Oxford. 1901. (Presented.)
- Postgate (J. P., ed.) Corpus Poetarum Latinorum. 3 vols. 4to. London. 1893-4, 1900.
- Pottier (E.) Les Statuettes de Terre Cuite dans l'Antiquité. 8vo. Paris. 1890.
- Proctor (R.) Printing of Greek in the 15th century. 4to. Oxford. 1900. (Presented.)
- Radet (G.) La Lydie et le monde Grec au temps des Mermnades. 8vo. Paris. 1893.
- Raoul-Rochette (D.) Monumens inédits d'Antiquité figurée. 1^{ère} Partie. Cycle Heroïque. Folio. Paris. 1833. (Exchange.)
- Renan (E.) Mission de Phénicie. Text and plates. 4to and folio. Paris. 1864. (Exchange.)
- Roscher (W. H.) Ausführliches Lexikon der griechischen u. römischen Mythologie. Parts 41-43. (—Orpheus.) 8vo. Leipsic. 1899-1901.
- St. Clair (G.) Myths of Greece. 2 vols. 8vo. London. 1901. (Presented.)
- St. Petersburg. Hermitage Museum. Vasensammlung der kaiserlichen Ermitage. By L. Stephani. 8vo. St. Petersburg. 1869.
- Schultz (R. W.) and S. H. Barnsley. Byzantine Architecture in Greece. Monastery of S. Luke, Stiris. 4to. London. 1901. (British School at Athens.)
- Somzée Collection. Catalogue des Tapisseries, &c. de la Collection de Somzée. By J. Fievez. Folio. Brussels. 1901. (Presented.)
- Sophocles. Ed. R. C. Jebb. 7 vols. 8vo. Cambridge. 1892-1900.
- Spon (J.) and G. Wheler. Voyage d'Italie, de Dalmatie, de Grèce, et du Levant, fait és années 1675, 1676. 12mo. Amsterdam. 1679. 2 vols.
- Studniczka (F.) Kyrene. 8vo. Leipsic. 1890.
- Thesaurus Linguae Latinae editus auctoritate et consilio Academicarum...Berolinensis Gotting. Lips. Monac. Vindobonensis, I. 1, 2, (—acuo). II. 1 (an—apluda). 4to. Leipsic. 1901.
- Thucydides. Ed. Duker. 3 vols. 8vo. Oxford. 1809. (Presented.)
- Vitruvius De Architectura lib. X. Ed. A. Rode. Text and Plates. 4to. and folio. Berlin. 1800, 1801. (Exchange.)
- Vogel (J.) Scenen Euripideischer Tragödien in griechischen Vasengemälden. 8vo. Leipsic. 1886.

- Watzinger (C.) Studien zur unteritalischen Vasenmalerei (De Vasculis Tarentinis). 8vo. Pamph. Darmstadt. 1899.
- Welcker (F. G.) Sylloge Epigrammatum Graecorum. 2nd edition. 8vo. Bonn. 1828. (Exchange.)
- Wickhoff (F.) Roman Art. Translated by Mrs. S. Arthur Strong. 4to. London. 1900. (Presented.)
- Wilamowitz-Moellendorf (U. v.) Aristoteles u. Athen. 2 vols. 8vo. Berlin. 1893.
- Winckelmannsprogramm. 50^{tes}. Berliner. Robert (C.) Homerische Becher. Winter (F.) Vorbild neu-attischer Reliefs. Furtwaengler (A.) (1) Eine argivische Bronze (2) Orpheus. Attische Vase aus Gela. 4to. Berlin. 1890.
- Winkelmann (J.) Storia delle Arti del Disegno presso gli Antichi. 3 vols. 4to. Rome. 1783-4. (Presented.)
- Winnefeld (H.) Hypnos. 8vo. Berlin and Stuttgart. 1886.
- Woburn Abbey Collection. Catalogue of Sculptures at Woburn Abbey, in the collection of His Grace the Duke of Bedford. By A. H. Smith. 8vo. London. 1900. (Presented.)
- Xenophon. Ed. E. C. Marchant. Vol. II. (Script. Class. Bibl. Oxon.) 8vo. Oxford. 1901. (Presented.)

A LIST OF PERIODICAL PUBLICATIONS IN THE SOCIETY'S LIBRARY, JULY 25, 1901.

- Académie des Inscriptions et Belles-Lettres. Comptes Rendus des Séances. (1901-2.)
- American Journal of Archaeology. I—XI. 2nd Series. I.—V. 1. (1885—1901.)
- American Journal of Philology. XIV.—XXII. 1. (1893—1901.)
- Analecta Bollandiana. XVII.—XX. 2. (1898—1901.)
- Annali dell' Istituto Archeologico. LII.—LVII. (1880—5.) End.
- Annuaire de l'Association des Études Grecques. XV.—XXI. (1881—7.) End.
- Annual of the British School at Athens. I.—VI. From 1894—5 to 1899—1900.
- Antike Denkmäler des Archaeologischen Instituts. I.—II. 3. (1886—98.)
- Archaeological Institute of America. Reports I.—XVII. (1880—96.) [III.—V. with School Reports.] Papers of Institute: American Series. I.—V.; Classical Series. I., III. 1, Bulletin I. (1883); American School at Athens: Reports I.—XV. (to 1895—6. Later Reports in Amer. Journ. of Arch.); Bulletin, I. (1883); Papers I.—V.
- Archaeologische Zeitung. I.—XLIII. (1843—1885.) End. Register.

- Archiv für Papyrusforschung. I. (1900.)
- Athenaion. I.—X. (1872—81.) End.
- Berliner Philologische Wochenschrift. XI.—XXI. (1891—1901.)
- Berliner Studien. I.—XVI. New Series. I.—III. 1. (1834—98.)
- Bulletin de Correspondance Hellénique. I.—XXIV. 6. (1877—1900.)
- Bullettino della Commissione Archeologica Comunale. XXV.—XXIX. 1. (1897—1901.)
- Bullettino dell' Istituto di Corrispondenza Archeologica. 1880—1885. End.
- Bullettino di Paletnologia Italiana, Series III. I.—VII. 3 (1895—1901.) [III. imperf.]
- Bursian's Jahresbericht über die Fortschritte d. classischen Altertumswissenschaft. Jahrg. I.—XXIX. 1. (1873—1901.)
- Byzantinische Zeitschrift. I.—X. 2. (1892—1901.)
- Cambridge Philological Society. Transactions I.—IV. 2. (1881—99); Proceedings I.—XLV. (1882—97.)
- Classical Museum. I.—VII. (1844—50.) End.
- Classical Review. I.—XV. 6. (1887—1901.)
- Commission Impériale Archéologique.
Compte Rendu. 1878—1880 and 1882—8; Atlas 1878—1888.
For General Index, 1859—1881, see Reinach's *Bibl. des Monuments*, III., p. 145. Russian continuation, viz.: "Materials," Nos. 4—21 (1890—97) and "Reports" for 1889—1895 (1892—1897).
- Deltion of the Historical and Ethnographical Society of Greece. I.—II, V. 17—19. (1883—1899.)
- Egypt Exploration Fund. Reports. 1895—1900.
- Ephemeris Archaeologike. Third Series. 1884—1900.
- Göteborgs Högskolas Arsskrift. I.—IV. (1895—8.)
- Hellenikos Philologikos Syllogos (of Constantinople). IV.—XVI. (1871—1885.) XVIII. Suppt. XX.—XXVII. (1891—1900.)
- Hermes. XXVII.—XXXVI. 2. (1892—1901.)
- Institute (Royal) of British Architects. Proceedings, N.S. II.—IX. (1886—1893). Transactions, 1880—1892. Journal, 3rd Series. I.—VIII. 3. (1894—1901.)
- Jahrbuch d. Kais. Deutsch. Arch. Inst. I.—XVI. 1. (1886—1901.)
- Jahreshefte des Oesterreich. Arch. Inst. in Wien. I.—IV. 1. (1898—1901.)
- Journal of the Anthropological Institute. I.—XXVI. New Series, I.—III. 2. (1871—1901.)
- Journal of Classical and Sacred Philology. 1854—1857.
- Journal of Hellenic Studies. I.—XXI. 1. (1880—1901.) (Two copies.)
- Journal International d'Arch. Numismatique. I.—IV. 1. (1898—1901.)
- Journal of Philology. I.—XXV. (1868—97.)
- Journal of the Royal Asiatic Society. XII.—XIV. (1881—3.)
- Leipziger Studien. I.—XVII. (1878—95.)

- Man. I. 1—14. (1901.)
 Mélanges d'Archéologie et d'Histoire. I.—XXI. 2. (1881—1901.)
 Mittheilungen d. Kais. Deutsch. Arch. Instituts. Athenische Abth.
 I.—XXVI. 1. (1876—1901.)
 Mittheilungen d. Kais. Deutsch. Arch. Instituts. Römische Abth.
 I.—XVI. 1. (1886—1901.)
 Mittheilungen (Arch.-Epigr.) aus Oesterreich-Ungarn. XVII.—XX.
 (1894—7.) End. Continued as Jahreshefte, etc.
 Mnemosyne. I.—XXIX. 3. (1873—1901.)
 Monumenti Inediti dell' Instituto Archeologico. XI. pl. 13—XII.
 (1885.) End.
 Monuments Grecs. I.—II. (1872—97.) End.
 Monuments Piot. I.—VI. (1894—1900.)
 Neue Jahrbücher für das Klassische Altertum, etc. I.—VI. (1898—
 1901.)
 Neue Philologische Rundschau. XII.—XXI. (1892—1901.)
 Numismatic Chronicle. 1st Series. 1836 and 1848—54. New
 Series. Vols. I.—XX. Third Series. I.—XX. Fourth Series.
 I. 1—2. (1901.)
 Parnassos (Philologikos Syllogos). Vols. I.—V., VI. (Imperf.), and
 XI. XII. (1888). Epeteris I.—V. (1901.) (III. wanting.)
 Philistor. I.—IV. (1861—3.)
 Philologus, Neue Folge. XLVII.—LX. 2. (1889—1901.)
 Praktika of the Athenian Archaeological Society. 1873—1898.
 Revue Archéologique. 2nd Series. I.—XXXVI., XLI.—XLIV.
 XLII. imperf.). 3rd Series. I.—XXXVIII. 2. (III. Imperf.)
 (1860—1901.)
 Revue des Études Grecques. I.—XIV. 2. (1888—1901.)
 Revue de Philologie. XX.—XXV. 2. (1896—1901.)
 Rheinisches Museum für Philologie. XLVII.—LVI. 2. (1892—1901.)
 Wochenschrift für Klassische Philologie. XI.—XVIII. (1894—
 1901.)

A NEW PANDORA VASE.

[PLATE I.]

SCENES from the history of Pandora are rare in works of Greek art. There have at present been published, so far as I am aware, only five representations of her, in two reliefs and three vases.¹ These all represent her birth or her coming into being. All the vases are in the British Museum. To these I have to add a fourth vase (Pl. I.), recently presented to the Ashmolean Museum by Mr. Edmund Oldfield,² and bringing before us a fresh scene from the interesting history of the strange being made by the gods for the delusion and betrayal of men.

The tale of Pandora, as it appears in Hesiod, is so well known that I need only glance at its main features. When Prometheus had stolen for men fire from the gods, Zeus, determining to punish him, caused Hephaestus to make of earth a beauteous woman, whom the goddesses adorned with ornaments, but in whom Hermes implanted a deceitful heart and a treacherous tongue. The new creation was taken by Hermes to Epimetheus, who, neglecting his brother's advice to receive no gift from Zeus, welcomed her. But this was the beginning of many sorrows for men, for Pandora opened the *πίθος* or cask wherein were hidden all the evils that afflict mankind, and they issued forth, leaving at the bottom only Hope. This at least is the easiest way of reading the Hesiodic tale, which has in fact many curious features, and might repay a careful study.

We learn from Pausanias that the birth of Pandora was represented by Pheidias on the basis of the Parthenos statue at Athens. And in the case of two of the copies of that statue which have come down to us, we find on the basis rough sketches of reliefs which seem clearly meant for a summary suggestion of the scene as it existed in the original. On the basis of the Lenormant statuette³ we see on the left the Sun-god in a chariot, which is led by an attendant, on the right the Moon-goddess on a horse, apparently advancing towards the centre of the group, not turned from it as in the Parthenon pediment. Between Sun and Moon stand three erect figures, of

¹ I omit the Praenestine cista, *M. d. I.* vi. 39. It is difficult to understand what scenes of the story are here depicted; and one would like to be assured of the genuineness of the cista.

H.S.—VOL. XXI.

² From the collection of Count Crouel de Prez, *Sale Cat.* 1869, No. 151. Find-spot not recorded.

³ Michaelis, *Parthenon*, Pl. XV. 1, p. 275.

which the details are obscure. On the basis of the Athena from Pergamon,¹ we may, according to Dr. Puchstein, who has published it, trace or infer ten figures, all apparently female, moving in gentle procession and bearing gifts. But Pandora herself, curiously, seems to be omitted, at all events in that part of the relief which is not wholly defaced.

We can scarcely venture on the ground of these mutilated reliefs to draw very definite conclusions as to the way in which the birth of Pandora was treated by Pheidias on the Parthenos basis. That the Sun-god and Moon-goddess occupied the two extremities of the scene is rendered probable not only by the testimony of the Lenormant statuette, but also by the fact that in the closely parallel Pheidian relief which occupied the basis of the statue of Zeus at Olympia, and which represented the rising of Aphrodite from the sea, the Sun-god and Moon-goddess appeared in this position. Pliny tells us that in the Pheidian scene of the birth of Pandora twenty gods were represented as spectators, and Pausanias informs us that several deities were in similar fashion assistant at the rising of Aphrodite. Thus between the flanking figures we may best suppose a procession of deities, mostly goddesses, slowly moving towards the newly born or fresh made Pandora, and offering her gifts of clothing and jewels.

As regards Pandora herself in the group, we may perhaps venture, though without much confidence, to take a hint from the three vase-pictures. In each of these Pandora stands, a wooden or doll-like creature, apparently not yet fully alive. On the Bale cup² Athena is occupied with the dress of Pandora, while Hephaestus, who stands opposite, fashions her golden crown. On the Cyprus vase,³ which is fragmentary, we seem to have a similar scene, but with other deities present on either side. On the Altemura vase⁴ Athena holds out a wreath to Pandora; other deities stand on either side, but their participation in the scene is not obvious, save that Hermes seems to be starting on his errand towards earth.

We may regard it as at least not unlikely that, in the Pheidian relief, Pandora stood between Athena and Hephaestus to receive her natal or bridal gifts.

Quite another scene is depicted on the obverse of the Oldfield vase of the Ashmolean Museum. The painting consists of two groups, which have no close connexion one with the other. On the left Zeus gives commands to Hermes, in reference doubtless to the trap laid for Prometheus. On the right, Pandora, now alive and fully adorned, rises ghost-like out of the ground in the presence of Epimetheus. She is a delightful figure, clad in bridal drapery and veil, with a tall crown on her head. Her arms are stretched towards Epimetheus, who wears a wreath, is clad in a short chiton, and holds a hammer, and who shows a not unnatural surprise at the apparition, but certainly no repugnance to the fair vision who thus takes him by storm

¹ *Zeitschrift des Inst.* v. p. 111.

159.

² Gerhard, *Festged. an Wackelmann*, Pl. I :
Harrison, *Mythol. and Mon. of Anc. Athens*, p.

³ Rhyton from Paphos, *J.H.S.* ix. 221.

⁴ *J.H.S.* xi. Pl. XI.

Eros flutters above, holding out a fillet. All the persons depicted are identified beyond question, as their names are written in clear characters over them. The two groups represent the cause and the effect, the plot and its success. And the respective attitudes of Hermes and of Epimetheus signify, to those who understand the conventions usual in Greek painting, that an interval of time or of space occurs between the two scenes portrayed.

The scene on the reverse of the vase is of a more ordinary character. A young warrior or hunter, wearing petasos and chlamys, and holding two



spears, pursues a girl, while her companion escapes in the other direction. A floral pattern occupies the field on one side, while on the other we have the inscription ΑΛΚΙΜΑΧΟΣ ΚΑΛΟΣ. This scene scarcely admits of definite interpretation. It is unnecessary to describe in detail the form and decoration of the vase, as they are accurately given in the accompanying engraving. The height of the vase is to the top of the handles 19 inches, ctm. 48; the diameter at the mouth is 11½ inches, ctm. 29.

Recent researches into the history of Greek vase-painting enable us to assign to our vase a school and a date. The love-name Alkimachos, which occurs on the reverse, offers us a clue, which is easily followed up by consulting the new edition of Klein's *Vasen mit Lieblingsinschriften* (p. 165). In that work seven vases will be found bearing a dedication (so to speak) to Alkimachos, who is in one case characterised as son of Epichares, and in another is mentioned in conjunction with Axiopieithes. A lekythos with white ground bears the name Axiopieithes son of Alkimachos. We may conjecture with Wernicke¹ that a brother as well as a son of Alkimachos bore the name Axiopieithes, since father and son would scarcely appear with the title *καλός* on the same vase. In some of the vases which bear the name Alkimachos, the form Ω for O occurs, suggesting that they are the work of a Thasian or Parian painter, probably a companion or pupil of the great Polygnotus. But in the case of other vases, as in ours, the name is written in good Attic characters. Probably our vase is by an Attic master, and doubtless the myth of Pandora was current in Attica before Polygnotus came. The date of the vase is about the middle, or slightly earlier than the middle, of the fifth century. It is therefore exactly contemporary with the great works of Pheidias, and not unworthy even of that age.

We have now more closely to consider the subject of our vase-painting, which raises a variety of interesting questions as to mythology and the interpretation of vase-paintings.

At first sight we might be disposed to include it in the rare class of representations which have direct relation to literature, and to regard it as a conscious attempt to illustrate the Hesiodic tale. But a closer consideration shows that there are in it certain features which are not thus accounted for. For example, why does Epimetheus carry a hammer? and why does Pandora rise from the ground? Neither of these features finds an explanation in the tale as told by Hesiod and other ancient writers. The fact is that Greek vase-painters, like the great Tragedians themselves, are never free from the influence of certain conventions and traditions, which they accept perhaps quite unconsciously, and which guide their hands. Thus we frequently find in the works of these Greek craftsmen details and indications which owe their origin to primitive religious ideas, deeply seated in the minds of the people.

The exceedingly able and suggestive papers which Miss Harrison has recently devoted to the Erinyes, Ge and Pandora, and which have appeared in the pages of this Journal,² spare me the labour of examining in detail the origin of the Pandora myth, and enable me to discuss it in a less tentative and more summary fashion. I may therefore at once say that it is reasonable to find in the attitude of Pandora a reminiscence, conscious or unconscious, of the fact that she was in origin Ge or the Earth-spirit. This attitude belongs to Ge, whether she takes part in the Gigantomachy³ or whether she

¹ *Vasen mit Lieblingsnamen*, p. 117.

² *J.H.S.* xix. 205; xx. 99.

³ Overbeck, *Kunstmyth.* Pl. V.

hands to Athena the infant Erichthonius.¹ It belongs to Persephone, as she returns from the world of shades.² It belongs to the Erinnyes³ and to ghosts generally.⁴ And it belongs occasionally to Aphrodite, as in the vase of Genoa,⁵ the Ludovisi relief, and the relief of Pheidias at Olympia. Our vase definitely places Pandora in this group of Earth-spirits and ghosts.

The hammer carried by Epimetheus seems also to be not devoid of mythologic significance. According to the tale, it was of clay, not of metal, that Prometheus and his brother made man, and Epimetheus seems to have no right to the hammer. Here again an explanation is suggested by the comparison of another group of vase-paintings, which has been frequently discussed, and which sheds much light on the Ashmolean vase.

The most complete of these representations is figured in this Journal, 1899, p. 232, and discussed by Miss Harrison. A colossal female figure is rising through a mound or hill whereon trees grow,⁶ in the presence of Dionysus, Pan, two Satyrs, and Eros, who by attitude and gesture are evidently rejoicing in her *anodos*. Robert in his *Archäologische Märchen*⁷ cites many representations of the same class. Sometimes it is a half-length figure which emerges in the presence of Satyrs or Panisci. These Satyrs, in one instance at least, hold in their hands picks, such as are used for breaking up hard soil.⁸ On black-figured vases a gigantic head arises from the ground, on which two human figures strike with huge hammers (Robert, Pl. V. A). On later vases we find the same head, but Satyrs armed with picks take the place of the hammerers (Pl. V. B). Prof. Robert himself proposes to see in these representations the birth of a Spring-nymph. This view, however, has not met with general acceptance. Another theory was set forth by Prof. Furtwängler in 1891.⁹ Furtwängler rejects the above mentioned view of Robert, the view of Frühlner, who regards these pictures as representing the *Anodos* of Kora, and that of Strube, who sees a reference to the mysteries of Samothraee. His own opinion is that the group of representations belongs to the cultus of Ge at Phlya in Attica. He writes:¹⁰ 'A chief deity of Phlya was Ge, there worshipped as *μεγάλη θεός*, in combination with Dionysus *Ἀνθιος* and the Ismenian Nymphs (Paus. I. 31, 4). I think that we have here a safe clue for the interpretation of our vases. The rising goddess is the *μεγάλη θεός* of Phlya, and Eros is the cosmic Eros celebrated in the Orphic hymns.' 'Following out this clue, let us try to understand the main figures of these vases, the hammering men. As to the meaning of their action, their hammering on the head of Ge, there can be no doubt. Clearly it is symbolic, and must signify a mastering and taming of the hard earth.' 'The

¹ Roscher, *Lexikon*, p. 1306.

² Overbeck, *Kunstmyth.* Pl. XVIII. 15.

³ Baumeister, *Denkm.* p. 423.

⁴ Baumeister, p. 1118; *M. d. I.* iv. 19.

⁵ *Rom. Mittheil.* xiv. Pl. 7.

⁶ Miss Harrison writes: 'She rises up through the *χῶμα γῆς*, the omphalos, the grave-mound, which is coated with the usual stucco.' The presence of the trees, however, seems to show

that the mound is not a mere stucco erection.

⁷ Pp. 194 and foll.; cf. *Rom. Mittheil.* xii. 4.

⁸ The published representations of this vase are incorrect: the spectators are Satyrs. Robert, *Arch. Märchen*, p. 199.

⁹ *Jahrbuch des arch. Inst.* 1891, p. 113.

¹⁰ *Ibid.* p. 116.

notion which lies at the basis of the representation is that of a heavenly deity attacking the Earth with storms and subduing its obstinacy. This idea must lie at the root of our vase-paintings: by mighty blows the Great Goddess is melted in the spring from her winter numbness.¹

That the beings who arouse the Earth are in earlier vases represented as men with hammers, according to Furtwängler Cyclopes, and in later vases as Sileni, need not, as Furtwängler observes, surprise us, since Löschke and other writers have shown how closely related in Greece are the respective circles of Hephaestus and of Dionysus.

It is noteworthy that in the deme of Phlya there was also a shrine of Demeter *Ἀνησιδώρα*, who seems to have been but a varied form of the *μεγάλη θεός* of the locality.

The evidence in favour of Prof. Furtwängler's view is very strong; and in most points it may fairly be regarded as established. But as regards the interpretation of the figures armed with hammers or picks, Miss Harrison¹ rejects the view that they personify the storms of spring. In the place of this mythological explanation she puts one which is more human and historic. She regards hammer and pick alike as agricultural implements used for breaking up the clods of earth; and sees in Satyrs and Panisci representatives of the early peoples of Greece who worshipped the Earth-spirit, and were used in their primitive ritual to summon her by beating and breaking the ground in spring.

Between these two methods of interpretation one may hesitate; but both alike connect the cultus of Earth and the myth of Pandora with a primitive stratum of Greek mythology. To this point we will presently return.

Thus the group of Pandora and Epimetheus on our vase seems to have roots which go down behind the Hesiodic tale. It carries our minds to other vase-pictures which almost beyond doubt have connexion with the pre-Olympian worships of Greece. Our Pandora and Epimetheus seem to lose their dramatic and concrete individuality and to be merged in earlier forms of being. Pandora, instead of being a fair demon, a Lamia tricked out to mislead the ancestors of mankind, becomes a form of the Earth-Mother rising in spring. It is Hesiod or the religious tale which he adopted that degrades the all-bestowing Earth into a deceitful spirit. And though our vase-painter was doubtless familiar with the Hesiodic tale, and meant to illustrate it, he has not shaken himself free from traditions, both mythologic and artistic, which influenced him, it may be, beneath his consciousness.

Epimetheus also, besides his Hesiodic character, shows traces of older and perhaps deeper meaning in the hammer which he bears, and to which he does not seem to have a right. It occurs to us that there was a satyric play of Sophocles called *‘Pandora or the Hammerers.’*² Has our vase any relation to that play? This is a question which scarcely admits of reply, since

¹ *J.H.S.* 1900, p. 107.

² *Πανδώρα ἢ Σφυροκόποι.*

we know nothing of this work of Sophocles. It is perhaps simpler to regard the presence of the hammer as a survival, indicating some relation between Epimetheus and the primitive figures of Satyr and Paniscus, which appear on other vases as assisting at the Anodos of the great Earth-goddess.

It may of course well be doubted whether these obscure mythologic connexions were present to the mind of the artist of the Oxford vase. Dramatically, it would be absurd, at the moment when the fair young Pandora appears to the dazzled eyes of Epimetheus, that the painter should suggest her original identity with the ancient Earth-Mother. But a critic can often find in a painting a meaning of which the author of it was unconscious.

Few things can be more perilous than the attempt to classify and interpret the fleeting forms of Greek myth, which change as one looks at them like a wreath of smoke or a passing cloud. Yet perhaps it may be desirable to try whether our vase gives any new hint or help in this direction.

The cult of Phlya was in the hands of the Lycomidae, for whom, as Pausanias tells us, Pamphos and Orpheus made hymns.¹ The Lycomidae were closely concerned with the cultus of Demeter at Athens and elsewhere. Furtwängler suggests that they were at the bottom of much in the Orphico-Hesiodic Theogony. It seems that this conjecture is greatly confirmed by our vase. We are able to bring forward a fresh and independent piece of evidence, which forms a link between the worship of Ge, such as that which had its seat at Phlya, and the Hesiodic mythology. And thus we gain a fresh view of the fact that between the mystic Orphic religion of Greece and the beliefs of the primitive inhabitants of Greece there was a close connexion. And we gain a fresh view of the relations between both of these and the Hesiodic Theogony.

The tale of Prometheus, as it reaches us in Hesiod, has been roughly and imperfectly moralised. The figure of Epimetheus, the foolish and unrestrained double of Prometheus, seems to be an addition. On the other hand many points in the tale, such as the conveyance of fire in a hollow reed, the mutual bargaining and overreaching between gods and men, and other features, seem very simple and primitive. Thus while the basis and matter of the poetical rendering are made up of current myth and old-world tales, this material has been worked up with a purpose, in much the same way as Aeschylus, in a later age, worked up the Prometheus legend. But whereas the motive of Aeschylus is in the main a glorification of man, the motive of Hesiod is in the main a vilification of woman.

To Hesiod Pandora seems to bear closer resemblance to Aphrodite than to Ge. Her decking and adornment by the gods with crown and necklace and other ornaments for the purpose of making her attractive is an essential part of the story. The Pandora of our vase is thus clad in splendid array. And the purpose of her creation, according to Hesiod, is that she may through love win the mastery of Prometheus, and then by her wicked arts and malicious doings punish him for his offence against the gods. This is nearer

¹ Paus. ix. 27, 2.

to the Greek conception of Aphrodite than of any other deity. And one's mind recurs to the fact already pointed out that in the mind of Pheidias the birth of Aphrodite and the birth of Pandora seem to be closely related one to the other. This is a very suggestive hint.

It is notable that many nations, far apart one from the other, the Jews, the Greeks, the Germans, the Iroquois and Blackfeet of America, should all associate the introduction of evil into the world with the first appearance in it of woman.¹

The whole group of legends which narrate the story of Prometheus and Pandora, and of Deucalion and Pyrrha, stands apart from the ordinary tales of Greek mythology, being connected, not so much with the history and deeds of the gods, as with the creation of man, the birth of woman, and the great flood. Every one who knows his Bible must have been struck with the remarkable likeness which exists between this group of tales and that set forth at the beginning of *Genesis*. Common to the Greek and the Jewish cosmogony are many points: the making of man out of earth and his animation, the production of woman and the evil thence arising, the flood survived by a single family who repopled the empty lands. Does this imply that the Greek myth is of Semitic origin?

This is of course no new question, but one which has frequently exercised the learned. Our grandfathers were disposed to regard the Hesiodic tales of the making of man and the Greek tradition of a great flood as echoes of the historic events of which a true record was preserved in *Genesis*. Our fathers had little difficulty in supposing that these tales were passed on to the Greeks by Phœnician traders. To us a somewhat different origin would naturally suggest itself. It is a tempting view, as indeed I have already suggested, to suspect that the Lycomidae and their Mysteries, the cults at Phlya, and the whole cycle of Prometheus and Pandora legends belonged originally to the pre-Aryan population of Greece, which may have been of Canaanite race. As early as 1888 it was maintained by Prof. Ramsay,² that in Greece as in Asia Minor the lower stratum of the population was formed of a pre-Greek race, devoted to the worship of great Earth-goddesses, while the upper stratum consisted of the conquering Aryan tribes, who brought in male deities, and the patriarchal as opposed to the matriarchal scheme of society. The mysteries of Greece, both Eleusinian and Orphic, would naturally be based on survivals belonging to the religion of this primitive and conquered race, but of course hellenized.

This view is attractive, and has strong claims on our acceptance. But to apply it directly to any province of Greek mythology involves much risk. Greek myth, as it has come down to us, is so highly composite, has been so many times worked over and worked up for various purposes, that it may well defy the keenest powers of analysis. While on the one hand the legends dealing with Prometheus, Deucalion, Pandora, and Pyrrha and the rest seem to belong to a stratum of religion which may be roughly called

¹ See Welcker, *Griech. Götterlehre*, i. 759, &c.

² *J.H.S.* ix. 351.

Babylonian, on the other hand in the Hesiodic *Catalogues of Women* the characters I have mentioned are placed at the very origin of the Hellenic stems, and the myths concerning them cling closely about Dodona and Phthia, and Lycorea and Athens, and other thoroughly Greek sites. And in a recent work,¹ Dr. Usener has shown in detail that the Greek myths of the deluge bear a closer likeness to those of India as recorded in the Mahabharata than to the accounts cherished by the Babylonians and the Jews. Moreover we must remember that some of the primitive tribes of North America, of New Zealand and of other countries possess cosmogonies which might well pass, with a hasty observer, for variants of the Semitic *origines*. One may fairly say that if the Hellenes took the materials of their cosmogonies, of many of their local cults, and of their mysteries from an earlier stratum of inhabitants, they used those materials freely in accordance with their own ideas, just as in art they turned to their own purposes the ornamental motives which they borrowed from Egypt and from Assyria. Perhaps we in this age, in our passion for tracing origins, are liable to overlook this truth. It may be necessary to dig up the barbarous roots of Greek legend and cultus, but it is a pity if in doing so we neglect the flowers and the fruit which derive their nutriment from those roots. What is important and interesting in Greek myth and cosmogony and mystery is not that which is more or less common to all primitive peoples, but that which the Greek spirit added to this original material, working it into beautiful and ethical forms.

Is it possible to trace a connexion between the tale of Pandora and Epimetheus and other Attic legends? For example, the legends which tell of the liberation of Athena from the head of Zeus by the blow of an axe or a hammer, hesitate whether the decisive blow was given by Hephaestus or by Prometheus. Here we have Prometheus, of whom Epimetheus is but the double, swinging his weapon to some purpose. There may have existed at Phlyra some more modest cousin of the standard Athenian tale. Again, it has been suggested by Löschcke that the loosing of Hera from her bonds by Hephaestus is a parallel story to that of the loosing of the Earth-deity from the soil by blows of the hammer. And further, our group of the hammer-bearing Epimetheus united by Eros with Ge-Pandora, seems to illustrate in no remote way, though confusedly, the various Attic legends of the marital relations between Hephaestus and Gaia, or between Hephaestus and Aphrodite or Athena.

I do not however propose at present to venture further into this realm of mist and shadow. It may suffice that we have won a glimpse of the process by which the barbarous myths of the primitive peoples of Greece were refined, made poetic, and partly moralised by the increasing influence of the Hellenic religion of Olympus.

PERCY GARDNER.

¹ *Die Sintfluthsagen.*

PATROCLES AND THE OXO-CASPIAN TRADE ROUTE

THE statement is usually made, that Greek geographers between Herodotus and Ptolemy believed the Caspian to be an inlet of the Northern ocean; that the Greeks, from the time that they first knew of the Oxus, believed it to flow into the Caspian; and that raw silk and other articles of commerce were carried down the Oxus into the Caspian and thence in due course to the Black Sea.

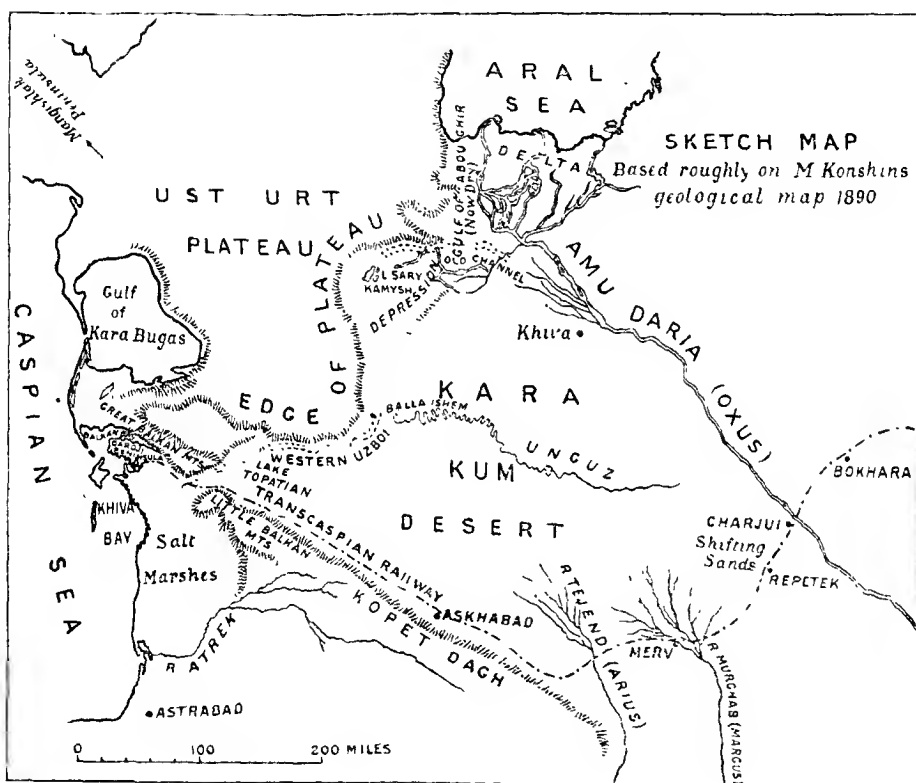
Even before Alexander, perhaps as early as Herodotus, there was a vague notion that the Caspian was, or ought to be, connected with a circumfluent ocean, as the other large sheets of salt water then known were; but this notion did not take definite shape till after the only recorded navigation of that sea by Greeks; and it perhaps requires explanation, why a genuine voyage should have given definite shape to a false notion.

Recent investigations appear to have rendered it fairly certain that the Oxus never flowed into our Caspian within any historical period, though it may have sent, and probably did send, a branch westward into the Sary-Kamysh depression, then either a lake or a part of the Aral. If the Oxus did not enter the Caspian, it is clear that some explanation of the Greek belief that it did, and of the trade route, would also be required. If then, in connection with this trade route, two errors appear in what may be called the ordinary view, one as regards the Oxus and one as regards the Caspian, it is at least possible that these two errors may be due to a common source, the discovery of which might throw light upon the whole matter. It is the object of this paper to indicate the direction in which I believe the explanation to lie.

Before going through the Greek notices, it may be as well to state briefly what I conceive to be the present position of the Oxus question. There are three routes, by one or more of which the Oxus has been supposed to have once entered the Caspian; (1) by the Uzboi channel from lake Sary-Kamysh; (2) by the Ungus channel across the Kara-kum desert, joining the Uzboi; (3) by a southern branch leaving the Oxus near Charjui, passing Merv, and thence following (roughly speaking) the course now taken by the railway, parallel to the line of the Kopet Dag and Little Balkan. All these views still find champions¹; at the same time some, as M. Lessar, have

¹ A summary of the views of modern Russian geographers will be found in an article (with map) by Prince Kropotkin, 'The old beds of the Amu-Daria,' *Geogr. Journ.* vol. 12 (1898), p. 306. It has always been, and still is, a Russian dream to turn the Oxus back into the Caspian

always been found to maintain that neither the Uzboi nor the Ungus were channels of the Oxus. This latter view is now strongly put forward by the Russian engineer M. Konshin,¹ who has come to the conclusion that the Oxus always ran in its present course, though it once threw off a branch into lake Sary-Kamysh; that there are no traces of beds or delta deposits of the Oxus in the Kara-kum; that the Kara-kum and the Western Uzboi were once gulfs of the Caspian, (the Ungus being an old sea-beach), as is proved (among other things) by the Caspian sea shells found there; and that the upper part of the Uzboi was a channel for the discharge of overflow water from Sary-



Kamysh to the Caspian. M. Konshin has explored and sunk shafts in the so-called old Delta of the Oxus, the Dardji peninsula, and found no trace whatever of fresh-water deposits, or of river-shells.²

¹ M. Konshin's results in Moser, *À travers l'Asie Centrale* (1886), p. 228 seq.; 'The old channel of the Oxus,' by Mr. E. Delmar Morgan, *Proceedings R. G. S.* vol. 14 (1892), p. 236; and Prince Kropotkin's article above cited. I only know them at second hand.

² Beside the sea and river theories of the

Uzboi, the view has been put forward by Bogdanovich that this channel, other than the extreme western portion, which may be due to the action of the sea, has been formed by rain. This view is examined by W. Komischke in *Das Ausland* for 1893, p. 657. 'Die Hydrographic des Oxus-Beckens', he sums up that, though

The latest theory with which I am acquainted is that put forward by Prof. J. Walther,¹ who has also explored personally the supposed old mouth of the Oxus at Balkan Bay. He also thinks that the Oxus always ran in its present channel (subject to the regular tendency of its bed to shift eastward with the earth's rotation), with the possible exception of a branch flowing into the Sary-Kamysh depression. His chief argument is drawn from the absence elsewhere of deposits of the typical Oxus mud. In particular he shews that no *river* can ever have flowed into the Caspian at the supposed old mouth of the Oxus. He differs from M. Konshin about the Uzboi; his numerous measurements shew that the Sary-Kamysh depression, while 89 m. lower than the present surface of the Aral, is 92 m. lower than Karahuhunck, the point where the Uzboi channel commences, and that in consequence the Uzboi can never have taken the overflow from Sary-Kamysh to the Caspian. At the same time he concludes against the Western Uzboi having ever been an arm of the Caspian on the ground that, if so, this arm can only have shrunk and retired through evaporation, and an overflow channel like the Uzboi cannot have been formed by this means. Without being a geologist, I may be permitted to remark that Prof. Walther does not appear to have met M. Konshin's argument drawn from the presence of numerous sea shells, similar to those now living in the Caspian, on the surface of the Western Uzboi; while the whole region is notoriously subject to alterations of the level of the ground; the Caspian is known to have altered its level several times, beside its regular loss from evaporation. A rise of 20·17 m. would take the sea up between the Balkans as far as the so-called lake Topatian.

Whatever the facts, however, as to the Uzboi, we may take it as fairly certain that the Oxus never reached the Caspian by any of the three routes; since, by any route, there is only one gap in the hills between the Ust Urt plateau and the Kopet Dag through which it could have passed, viz., that between the Great and the Little Balkan through which the railway now runs; and the investigations of both M. Konshin and Prof. Walther have rendered it fairly certain that there was never any Oxus delta at or near Balkan Bay. It may also be noticed that the Oxus still periodically overflows into the Sary-Kamysh depression, the last occasion on which it did so being during the coronation of the present Czar, when the Khivans broke down a dyke.

With this much by way of prelude, we may turn to the Greek writers. Our principal concern will be with Patrocles, but I shall briefly go through the chief notices before and after his voyage.

Herodotus² mentions the Caspian as a sea by itself, which does not join

one cannot trace all the steps of the gradual separation between Aral and Caspian, 'wahrscheinlich bestand der albngrische sowie der balchanische Abfluss in seiner ursprünglichen Bedeutung als Meeresstrasse bis in die historische Zeit hinein.'

¹ 'Das Oxus-problem in historischer und geologischer Beleuchtung,' in Petermann's *Mittheilungen* (1898), No. 9.

² Herod. 1. 202: οὐ συμμίσγουσα τῇ ἐπέργῃ θαλάσση.

the other sea.¹ About 'the other sea' he gives no information. But he has heard dimly of the Oxus or Jaxartes as a river with 40 mouths, all ending in marshes but one, which flows clear into the Caspian; there are islands in it as big as Lesbos, inhabited by savage fish-catchers and other strange people.²

The next notice concerns Alexander. Arrian (*Anab.* 7, 16) says he wished to know whether the Caspian was connected with the Euxine or with the Eastern Indian Ocean. This may have been a mere guess; but it is also possible that Alexander's intelligence department had got a report of a supposed connection with some other sea.³ Anyhow, there were now three hypotheses. Here belongs a story told by Strabo (11, 509) that men flattered Alexander by identifying the Maeotis, which receives the Tanais, with the Caspian which receives the Jaxartes, a river that the Greeks at first took for the Tanais.⁴ Strabo adds that they called the latter sea a lake and said that it and the Maeotis were connected. Alexander sent one Heracles to Hyrcania to build ships and explore the sea; as far as we know, this expedition had no result. The rest of Arrian's remarks appear to concern what he thought himself.

The next generation saw the one attempt at exploration known to us as made by the Greeks, when Seleucus sent his admiral Patrocles to the Caspian. Eratosthenes cites a periplus of this sea as known to the Greeks, which I assume to be that of Patrocles.⁵ This periplus speaks of two voyages, one along the coasts of the Albani and Cadusii, the other along the coasts of the Anariaki, Mardi and Hyrcani towards the mouths of the Oxus and Jaxartes: the point of junction, according to the situation of these tribes, would be somewhere at the extreme S.W. of this sea. As to the first voyage, though the Albani are named first, no one could suppose that Patrocles built his ships up in the north and sailed south; even without Pliny's evidence, we might fairly suppose that he started from the S.W. corner, the point of

¹ Mr. J. L. Myres, in a paper read before the Geographical Society on 'An attempt to reconstruct the maps used by Herodotus' (*Geogr. Journ.* vol. 8 (1896), p. 605), has put forward a theory that Herodotus had two different ideas about the Caspian, based on different maps, and that in 4, 40, he (Herod.) 'assumes that the Caspian, as a part of the undiscovered "North Sea," corresponds with the known Red or "Southern" Sea, a conclusion which reappears in Eratosthenes,' and which is inconsistent with Herod. 1, 202.

² 1, 202: he calls it the Araxes. It is generally supposed to represent the Jaxartes, because of the marshes; but, *a priori*, it is much more likely to be the larger and better known Oxus, which must, in a natural state, have had an equally marshy mouth or mouths.

³ Alexander, in his speech at the Hyphiasis (*Arr. Anab.* 5, 26) says: καὶ ἐγὼ ἐπιδείξω...τὸν

μὲν Ἰνδικὸν κόλπον ξυῖνον ὄντα τῷ Περσικῷ, τὴν δ' Ἑρκανίαν τῷ Ἰνδικῷ. but this, if he said anything of the sort, is clearly special pleading.

⁴ In Plutarch (*Alex.* 44) Alexander is made to take the Caspian for part of the Maeotis.

⁵ Strabo 11, 507. This is Susemihl's opinion (*Gesch. d. Griech. Lit. in der Alexandrinerzeit* 1, 657-9); and though Strabo does not actually say so, we know of no other Greek who ever sailed on the Caspian, and Strabo says that it was little exploited, owing to the brief and disturbed nature of the Macedonian rule in those parts (11, 509); besides, Strabo expressly cites the measurement of one part of this periplus, the distance between the mouths of the Oxus and Jaxartes, as Patrocles' (11, 518), and Eratosthenes (l.c.) speaks as if no other periplus were known (τὸν ὑπὸ τῶν Ἑλλήνων γνωριζόμενον περίπλουν).

junction of the two voyages.¹ The reason for starting from here, and not from Hyrcania, may merely have been convenience of ship-timber.² Be that as it may, the fact agrees curiously with what Strabo says about the 'bight' ³ of the Caspian. The mountains of Media and Armenia project like the horns of a crescent, and form the 'bight' of the Caspian Gulf.⁴ This gulf, running in southward from the ocean, is at first narrow enough, but as it goes further in it broadens, its greatest breadth, about 5000 stades, being obtained over against the 'bight'; but the length from the 'sailing-in point' to the bight is perhaps a little more than the breadth, as the 'sailing-in point' is very near the uninhabitable zone.⁵ This shews clearly enough that Strabo reckons the length of the sea from *S.W. to N.E.*, roughly speaking, that is, from the point whence Patrocles started to the 'sailing-in point'; and this passage alone should be conclusive against any theory which places the 'sailing-in point' at the extreme north of the Caspian, as we know it.⁶ I may add that, so far as I know, no one has taken Patrocles to the extreme north; the more general opinion is that he perhaps only went a little way.⁷

We can now examine Patrocles' voyage in detail.⁸ Why he went north

¹ Pliny *N.H.* 6, 13, quoting from the same passage in Eratosthenes, has 'ab exortu et meridie per Caucasiae et Albaniae oram.'

² Aristobulus (Strabo 11, 509) notes a deficiency of light wood in Hyrcania, though plenty of oak.

³ *μυχός*.

⁴ Strabo 11, 508: *τούτων (the mountains) ἐστὶ μνηροειδὲς τὸ σχῆμα κατὰ τὰς ὑπωρείας. αἱ τελευτῶσαι πρὸς θάλατταν ποιοῦσι τὸν μυχὸν τοῦ κόλπου.* So Pliny 6, 13 *lunatis cornibus*; Curtius 6, 12. The map does not permit of identification; but Curtius shews that the crescent meant was only a blunt one, *flexu modico*.

⁵ Strabo 11, 507: *ἔστι δ' ὁ κόλπος ἀνέχων ἐκ τοῦ ὠκεανοῦ πρὸς μεσημβρίαν κατ' ἀρχὰς μὲν ἱκανῶς στενός, ἐνδοτέρω δὲ πλατύνεται προϊών, καὶ μάλιστα κατὰ τὸν μυχὸν ἐπὶ σταδίου πού καὶ πεντακισχιλίου· ὁ δ' εἰσπλοῦς μέχρι τοῦ μυχοῦ μικρῶ πλείωνον ἂν εἴη συνάπτων πως ἥδη τῇ ἀοικίῳ.* 'Sailing-in point' is of course not meant as a translation of *εἰσπλοῦς*; it is the point whence the length of the *εἰσπλοῦς* is reckoned, sometimes (2, 74, 119; 11, 491) called *στόμα*.

⁶ The evidence for this will appear, p. 17 seq. Here I merely wish to note that in one passage (11, 519) Strabo seems to think the *στόμα* is in the North. But I think, as will appear, that there is often a distinction between Strabo's view, and the true view that he has preserved without always understanding it. Even in 11, 519 the *στόμα* is straight opposite to the *μυχός*;

and that the *μυχός* is S.W. is indisputable, and (so far as I know) generally admitted.

⁷ Susemihl, *l.c.* The Greeks of about Strabo's time seem to have known nothing definitely of the northern part. Their names for the sea, Caspian, Hyrcanian, Albanian, are southern local names, originally no doubt signifying different stretches of water (Pliny 6, 21 *circumvectis in Hyrcanium mare et Caspium* 6, 13 *ante quos mare quod est Albanum nominatur* cf. Arist. *Meteor.* II. 1 § 8); but they have no northern local names, unless Scythicus sinus (Pliny 6, 13; Pomponius Mela 3, 5) be one. Arrian (*Anab.* 7, 16) says the *ἀρχαί* of the sea had not been discovered; but Strabo, by giving the length and breadth, seems to have thought it was bounded all round, subject to the question of the *εἰσπλοῦς*. And so, clearly, did the authorities from whom Pliny (6, 13) took the phrase 'circutim a freto.'

⁸ Negative criticism, refuting earlier attempts (based on the measurements) to locate the point reached by Patrocles, in Wagner's 'Patrocles am Kara-Bugas?' *Nachr. v.d. Königl. Gesellschaft* (Göttingen) 1885, p. 209. It appears to me that the writer proves his points; but that the problem has rather shifted its ground. Any system of measuring out this voyage must be vitiated (other things apart) by the fact that we do not know where to measure from; for that Patrocles started from the mouth of the Mardus (Kizil Uzen), though likely enough, is merest guesswork.

first is clear: for Pliny says that Seleucus, at the time of his assassination, had it in his mind to make a canal between the Caspian and the Chimmerian Bosphorus.¹ If Seleucus, in sending out Patrocles, had any such idea, the latter would soon have discovered its impossibility. If he really went 5,400 stades in this direction, the distance that Eratosthenes gives,² he must have gone pretty far north; but as no tribes north of the Albani are mentioned, it may be supposed that he himself only went part of the distance, and heard that the sea extended for a considerable way further,³ and this the more readily as with his eastern voyage such seems actually to have been the case. That Strabo's account of the mouth of the Cyrus⁴ comes in the main from Patrocles I would conjecture from this, that he describes the people there as simple and bad at bargains, trading by barter but scarcely using money and having no knowledge of weights and measures; this might seem to apply best to a time earlier than Strabo's own, when Armenia and the neighbour lands were the great channel of overland trade.

But the chief interest of Patrocles' voyage begins when he turned eastward. At first sight it might appear from Eratosthenes' account of his periplus that he reached the mouths of the Oxus and Jaxartes; Eratosthenes even gives the measurements,⁵ from the 'bight' to the Oxus mouth 4,800 stades, and thence to the Jaxartes mouth 2,400 stades. But though Patrocles is one of the two authorities for Strabo's statement⁶ that the Jaxartes flows into the same sea as the Oxus, this same passage shews that he never reached the Jaxartes mouth himself; for Strabo adds 'the mouths of the two rivers, according to Patrocles, are 80 parasangs apart.' Patrocles, as a Greek sailor, would hardly measure in parasangs; and this remark of Strabo's suggests that Patrocles' information was hearsay, and derived from people who did reckon in parasangs, *i.e.* Persian-speaking folk of some sort.⁷ Now I would point out that if, for the distance between the mouths of the Oxus and Jaxartes, Eratosthenes turned parasangs into stades for the benefit of his Greek readers,⁸ he *may* equally well have done so for the distance from the 'bight' to the mouth of the Oxus; and Patrocles himself may never have reached the Oxus mouth at all. The fact that we have no description of its mouth (by name), while we have an elaborate one of *e.g.* such a river as the Cyrus, raises a presumption that he did *not* reach it. However, it is a necessary condition of this periplus that he should have sailed in a direction in which he could at least have heard that the mouths of

¹ Pliny 6, 11. He gives no express authority for this statement; but he has used some good sources in book 6, as well as bad.

² Strabo 11, 507 *i.e.*

³ He thought it as large as the Euxine: (Strabo 11, 508). I shall say something about the measurements presently.

⁴ Strabo 11, 501.

⁵ Strabo 11, 507.

⁶ Strabo 11, 518: Aristobulus is the other.

⁷ I know of nothing to warrant Sir H. Rawlinson's statement (*Proceedings R.G.S.* 1 (1879) p. 161) that Patrocles 'actually measured' the distance.

⁸ A proceeding that Strabo must be criticising when he insists (11, 518), with illustrations, on the extraordinary variation of length of the parasang in different places. Elsewhere (11, 507) he says that these measurements of Eratosthenes' are to be received with caution.

the Oxus and Jaxartes lay at such and such a distance before him. Now it has to be remembered, as a condition of the whole problem, that the evidence for the Jaxartes entering the 'Caspian' is just as good as that for the Oxus, and that the two must stand or fall together. There have been theories put forward for bringing the Jaxartes round the Aral;¹ some, I believe, have boldly abolished the Aral altogether; but the Jaxartes cannot by any means be made to cross the Ust Urt plateau. In fact, we must proceed on the assumption that the Jaxartes ran pretty much as it does now; and while on the one hand these facts would afford some support to a contention that the whole Aralo-Caspian salt-water system was sometimes referred to as 'the Caspian,' on the other hand they are quite fatal to any theory which takes Patrocles to any point² on the eastern shore of our Caspian further north than Balkan Bay, which is the most northerly point, south of the Ust Urt, where water from beyond the Balkans can enter the Caspian.

Here then we are pulled up short; for Patrocles *ought* to sail toward the Oxus mouth, *i.e.* out of the Caspian altogether.

His voyage having come to a standstill for the moment, we may stop also and enquire what is his supposed authority for the connection of the Caspian with the northern ocean.³ Let me say at once that this idea was in the air as we have seen, and that it is quite possible that Patrocles believed it. But what we want to know (remembering always that the 'sailing-in point' is opposite to the 'bight,' and has nothing to do with hearsay about the Volga or the north at all) is, on what grounds geographers who used Patrocles' narrative believed in this connection, that is to say, why a true voyage confirmed a false notion. Now Strabo, after giving Eratosthenes' account of Patrocles' periplus, goes on to make the sufficiently astonishing statement that *a man sailing into the Caspian*⁴ would find such and such things:—on his right hand Scythians and Sarmatians, on his left the eastern Scythians, reaching to the eastern sea and India; he distinguishes the northern and eastern Scythians accordingly. This statement has always been a stumbling block. Sir E. Bunbury says, 'So clearly indeed was this idea' (that the Caspian was a gulf of ocean) 'fixed in his (Strabo's) mind, that he describes the sea and the nations on its banks as they would present themselves *to a person sailing in from the North*.'⁵ This is hard on Strabo. Let us suppose instead that he pictured it from this point of view because he, or his informant, had heard

¹ Cf. Moser, *À travers l'Asie Centrale* p. 225 seq.; and Komischke's article before cited p. II. n. 2.

² *E.g.* the gulf of Kara Bugaz: or the promontory of Mangaschlak (von Gutschmid).

³ Susenihl, *l.c.*; Bunbury, *Hist. of Anc. Geog.* I, 644.

⁴ Strabo II, 507, εἰσπλέοντι. That this is not a figure of speech (= εἰσιόντι) is proved by the use of εἰσπλέον just before: cf. 2. 121, where he balances the 4 great seagulls, Caspian,

Persian, Arabian, and Mediterranean, each with a narrow εἰσπλούς from the outer sea. Cf. Pliny 6, 13 ab introitu; Pomponius Mela 3, 5, 4 introeuntium.

⁵ Op. c. 2, 283. The italics are in the original. Strabo has been even worse treated by the writer of the article 'Caspian' in the *Encycl. Britannica*, who refers to him *à propos* of a great Aralo-Caspian sea discharging into the Obi—presumably at some geological epoch.

that some one had sailed or could sail, or that some people habitually did sail, in from somewhere.

From where? Strabo half answers that question himself. For, as if not content with his first statement,—after a few words about the Scyths, and a fling at Ctcsias, Herodotus, and the rest,—he goes on to say that, at any rate, as a man sails into the Caspian, the nomads that he finds on his left are called by the present generation Daai and surnamed Parnoi; then comes a desert, and then Hyrcania, and here we reach the open sea, which continues to the ‘bight.’¹ This clearly has nothing to do with the north of the Caspian. The Parnoi, over against Parthia, are well enough known²; so is the desert north of Parthia and Hyrcania. In fact, while Strabo’s supposed voyager sees, on his right hand, a vague vision of Scyths joining the European Scyths and Sarmatians stretching to the Tanais, on his left he sees well-known people and things very precisely, and what he sees fits in pretty well with the supposition of a man sailing into or journeying to the Hyrcanian sea down the line of the Uzboi, roughly speaking, and does not, so far as appears to me, fit in with anything else. I may add that the ‘mouth’ of the Uzboi is roughly opposite to the ‘bight.’

Now what the supposed voyager sailed in by was an arm of the sea. We have a quantity of very explicit statements³ on this point, which refer to a long narrow sea-strait, something like a river, and no bar to the intercourse of the Scythians on either side with each other. Down this sea-strait Strabo’s supposed voyager sailed; and our accounts represent that at the other end of this strait was ‘ocean’ i.e. open water.⁴

We can now take up Patrocles’ interrupted voyage again. Coasting along Hyrcania, as we may presume he did, he would naturally come to the arm of the sea down which Strabo’s imaginary voyager sailed, and equally naturally, if he followed the coast, sail up it; for it must be remembered that the whole coastline of Khiva Bay would be covered with water, if there were

¹ Strabo 11, 508: . . . Πάρνοι· εἰτ’ ἔρημος πρόκειται μεταξύ, καὶ ἐφεξῆς ἡ Ὑρκανία, καθ’ ἣν ἡδὴ πελαγίζει . . .

² Strabo 11, 515 Parnoi said to be Δάας *μετανάστας* from the Daai beyond Maeotis; some of them dwell on the Oxus. But the best commentary on the above is 511, where it appears clearly that Strabo imagines 3 parallel belts, (1) cultivated land, Hyrcania, Nesaia, Parthia; (2) Desert; (3) nomads, Daai, Aparnoi and others, the Aparnoi nearest Hyrcania; they raid regularly across the desert. Cf. Ptolemy 6, 10; and Agathodæmon’s map, which places the Daai and Parnoi south of the Oxus.

³ Strabo 11, 507 already cited. Pomponius Mela 3, 5, 3 *Mare Caspium ut angusto ita longo etiam freto primum terras quasi fluvius irrupit*. Pliny 6, 13 *irrupit autem arctis faucibus et in longitudinem spatiosis*. . . . utrinque

accollunt Scythae et per angustias inter se commeant. Pseud. Ar. *de mundo* 3, 11; Solinus 14, 18. It is not clear that Patrocles is the common source, but I am willing to assume it; anyhow he spoke of the ‘mouth’ of the Caspian (Strabo 2, 74).

⁴ That this sea-strait cannot be far from where I have put it, and that it has nothing to do with the north, is also shewn by Strabo’s calling the ‘mouth’ of the Caspian ‘the Hyrcanian mouth’ (11, 519) [cf. n. 1, p. 24]. Pomponius Mela also connects the ‘os’ with the ‘sinus Hyrcanus,’ 3, 5, 3. His account has become very confused; but it may be worth noticing that on the narrow strait he places the Derbikes (3, 5, 4), a tribe whom Strabo (11, 514) places near the Hyrcanians and Pliny 6, 16, on either side of the Oxus. Ptolemy 6, 10 puts them in Margiana, on the Oxus.

(ex hypothesi) a sea-strait running in between the Balkans. If he sailed up this sea-strait—in fact discovered it—the notices of it in Greek writers are explained, while he himself proceeds in the right direction, towards the Oxus mouth.

Now we have seen that the measurements given need not mean personal measurements, and that it is, at least, quite possible that he never saw the Oxus mouth himself. Assuming that the Oxus had a mouth at lake Sary-Kamysh, and that the sea-strait up which he sailed did not join that lake,¹ how far did Patrocles get?

The only answer is, far enough to hear of the Aral, the great open water to the north, but not far enough to make sure that the gulf up which he sailed did not join it. In fact, the actual notices of this strait would, with one exception,² fit in better with the theory that the waterway continued to Sary-Kamysh³ and the Aral; but except in a few cases we cannot discriminate what Patrocles saw from what he heard. We conjecture that he found people who gave him the distance in parasangs to the Jaxartes mouth; it would be very curious if this were the only information they gave him.

Now the net result of his voyage was, that geographers were strengthened in the opinion that the Caspian joined the ocean, and also asserted the possibility of sailing round to India. In my view, those who say that Patrocles asserted the possibility of sailing round to India by *sea* are confusing two different things.⁴ What Patrocles said was this, that it was possible to sail from India to the 'mouth' of the Caspian (the 'sailing-in point').⁵ Strabo adds that the 'mouth' appears to be the most northerly point of the sea-coast on the way to India,⁶ and from the form of the sentence this last remark may also be Patrocles'. But even if it be, all that it proves is what we conjectured before, that Patrocles heard of 'sea' or 'open water' to the north; while the use of the word 'mouth' proves that he thought that the strait, up which he sailed, joined this open water. It does not prove that he reached it; but this much is clear, that to the open water at the 'mouth' there was, in his opinion, a waterway from India; and this waterway might extend, he thought, to Hyrcania.⁷

¹ I assume this, not as necessarily being the fact, but as being most against my own view.

² That the strait was no bar to the intercourse of the tribes on either side of it. But Turcomans swim the Oxus at its broadest. And the 'mouth' was looked on as narrow; Agathememus (3-13) says 4 stades across.

³ Curtius indeed (6-12) hints that great intermittent floods of water came into the Caspian. After speaking of the way this sea sometimes flooded the land and then retired, he says 'et quidam credidere, non Caspium mare esse, sed ex India in Hyrcaniam cadere.' Solinus appears to have heard a similar story and to refer it to snow-water. 14, 18 Caspi

maris . . . fauces maciantur imbribus, crescent aestibus (if Th. Mommsen's reading be correct). It would be interesting to know the source of this.

⁴ *I.e.* that the Caspian joined Ocean, and that one could sail from India into it.

⁵ Strabo 2, 71: τοῦ στόματος τῆς Κασπίας θαλάττης . . . ὅπερ . . . δοκεῖ . . . περίπλουν ἔχειν ἀπὸ τῆς Ἰνδικῆς δυνατὸν, ὥς φησιν . . . Πατροκλῆς.

⁶ 2, 71 same passage. ὅπερ . . . δοκεῖ αὐτῆς τῆς παραλίας μέχεσθαι τῆς Ἰνδικῆς ἀρκτικώτερον εἶναι σημείον.

⁷ Strabo 11, 518: see note 4, p. 19.

Now Patrocles *may* well enough have supposed that the open water which he heard of was the ocean; but for geographers at home it was probably sufficient to know that he had found a salt water strait leading towards unknown water of considerable extent; this *must*, on general principles of geography, be part of the circumfluent ocean.

Pytheas, too, had familiarised men's minds with the idea of great masses of water toward the north as an ascertained fact. However, there was more than this, and Pliny gives the hint.¹ He says, 'From the Caspian sea and the Scythian ocean the route turns eastward, the shore now fronting toward the east; the first part (of this land) is uninhabitable on account of the snow.' That is to say, somehow or other, a report of the actual polar sea was abroad.² I submit that Pliny's words can mean nothing else; and there is a curious bit of confirmatory evidence. In Ptolemy Philadelphus' procession there figured, among other strange beasts, a polar bear³; this creature could not have been passed south without some knowledge of its habitat being passed down with it, if only for the purpose of keeping it alive.

Be this as it may, Patrocles does not appear to have spoken of a sea route from the Caspian to the Indian ocean; and the idea that he did so is perhaps a misunderstanding of what he did say, as reported by Strabo. What are the facts of the case?

Patrocles had been sent by Seleucus to report on the possibilities of *trade*; principally, that Indian trade for which Syria and Egypt were rivals. At present Egypt, through Arabia, monopolised the *sea*-traffic; even if the Arab captains ran their cargoes up the Persian gulf instead, the caravan journey through Seleucia could hardly compete in cheapness with the way of the Red Sea and the Nile. Seleucus paid much attention to his north-eastern provinces; his eldest son, half a Sogdian by birth, governed them, his general Demodamas guarded the Jaxartes frontier; clearly, in contemplating a canal from the Caspian to the Euxine, and exploring the Caspian, he hoped to create a rival water-route; the Oxus should be a thoroughfare like the Nile, and Syria should have her sea-canal as well as Egypt.

Patrocles' report on the canal must have been adverse, of course; that on the Oxus seems to have been more encouraging. It entered the 'Caspian': it was navigable; it brought down Indian goods to Hyrcania, whence they were taken across to Albania and up the Cyrus, etc. But whether any one had actually sailed from India to Hyrcania was a matter of doubt; anyhow it was possible to do so.⁴ So far the report. Trade found its way down

¹ Pliny 6, 17 Cf. Pomp. Mela 1, 2, 3; Solinus 50, 1.

² I.e. that the cold land of the north was bounded by water. Pytheas had spoken of τῆς πεπηγυίας θαλάττης. Strabo brings the mouth of the Caspian and Ierne into connection as being both far north 2, 119 In 11, 507 the εἰσπλους of the Caspian is συνάπτων πως ἤδη τῇ αἰκίῃ.

³ Ath. 5, 201: ἄρκτος λευκὴ μεγάλη μῖα

⁴ The passages in Strabo are (1) 2, 73 τὸν Ὠξον οὕτω φασὶν εὐπλοῦν εἶναι ὥστε τὸν Ἰνδικὸν φόρτον ὑπερκομισθέντα εἰς αὐτὸν ῥαδίως εἰς τὴν Ἑρκανίαν κατὰγεσθαι καὶ τοὺς ἐφεξῆς τόπους μέχρι τοῦ Πόντου διὰ τῶν ποταμῶν (2) 11, 509 φησὶ δὲ καὶ εὐπλοῦν εἶναι (τὸν Ὠξον) καὶ οὗτος (Aristobolus) καὶ Ἐρατοσθένης παρὰ Πατροκλέους λαβὼν καὶ πολλὰ τῶν Ἰνδικῶν φορτίων κατὰγειν εἰς τὴν Ἑρκανίαν θάλατταν ἐντεύθεν δ' εἰς τὴν Ἀλβανίαν περαιούσθαι καὶ διὰ τοῦ Κύρου καὶ τῶν

the Oxus: query, if anyone had actually sailed the whole distance to Hyrcania.

Upon this, he has been made responsible for the idea of a N.E. sea passage to India,¹ that is to say, to the eastern or Indian Ocean. But surely that is a forced interpretation. What he had in his mind was India itself,² and not any Indian Ocean. India was not the unknown country it had been when Alexander wondered if the Caspian joined that ocean; on the contrary, the dominions of Seleucus' son-in-law were just now particularly well known; the practical question for Patrocles was merely whether trade with them viâ Bactra could not be made as paying as trade viâ Barygaza. And just in the same way that much goods came from Barygaza to Egypt, but even so late as the time of Ptolemy Physkon it was looked on as a wonderful thing for a man to do the whole voyage,³ so Patrocles most naturally observes that the goods came down the Oxus, but that it was doubtful if anyone had done the whole voyage, though he thought it was a possible one.

And this brings me to one other point in connection with Patrocles. Is it possible to determine from his narrative where and into what the Oxus flowed? I think not. All that we have to go upon are the measurements quoted by Eratosthenes, Strabo, and Pliny, calculated from a point which we do not precisely know, following the windings of a coast different from our coast, and probably only guessed at by some sort of dead reckoning, at best. However, for what they are worth, they come to this,⁴ that the Oxus mouth was 4,800 stades from the 'bight,' the

$$\text{Jaxartes mouth } 4,800 + \begin{cases} 2,400 \text{ at least} \\ 4,800 \text{ at most} \end{cases} = \begin{cases} 7,200 \\ 9,600 \end{cases} \text{ stades}$$

ἐξῆς τόπων εἰς τὸν Εὐξείνιον καταφέρεισθαι. (3) 11, 518: οὐχ ὁμολογοῦσι δ' ὅτι περιέπλευσάν τινες ἀπὸ τῆς Ἰνδικῆς ἐπὶ τὴν Ἑρκανίαν, ὅτι δὲ δυνατὸν, Πατροκλῆς εἴρηκε. Of these (1) and (2) represent a common original. There is nothing here about any Indian ocean, and I doubt if there ought to be anything about the Caspian either. (1) and (3) only say 'to Hyrcania:' (2) says 'to the Hyrcanian sea.' Now it is *not* natural to say that from the Hyrcanian sea (ἐντεῦθεν) goods were carried across (i.e. across the Hyrcanian sea—περαιοῦσθαι, from one side to the other) to Albania. I would suggest that *θάλατταν* may be a gloss, inserted by some one who had Pliny 6, 17 in his mind, where the Caspian is certainly mentioned. If it be the right reading, there is nothing to account for its omission in (1), and this appears to me conclusive. Of course, it may be contended that τὴν Ἑρκανίαν alone means the Hyrcanian sea; but is this possible unless the context render it *unmistakeable*? I have been through practically every instance of ἡ Ἑρκανία, the sea, given in Pape's *Wörterbuch d. Griech.*

Eigenheiten; there are 4 cases (Arr. *Anab.* 5, 26, 1 Strabo 2, 129 and 11, 519 and Ptol. 5, 13, 6) where *θάλασσα* is left to be supplied, and in all these passages ἡ Ἑρκανία *θάλασσα* has been mentioned just before and the wording of the context makes the meaning unmistakable: neither of these is the case in (2).

¹ E.g. von Gutschmid in art. 'Persia' in *Enc. Brit.* Tozer, *Hist. of Anc. Geog.* 136. Pliny gives a wild story of circumnavigation 6, 21; 2, 67.

² It may be of interest, in this connection, to note Peter the Great's orders to the ill fated Bekovitch expedition. They were to go up the old bed of the Amu to Khiva, win over the Khan, turn the Amu back into the Caspian, and sail in the Khivan boats towards India. Humboldt, *Asie Centrale* 1, 425.

³ The story of Eudoxus of Cyzicus. Strabo 2, 98 seq.

⁴ Strabo 11, 507 compared with 518. Pliny 6, 13 gives 4,800 and 2,400 stades, presumably following Eratosthenes. The symmetry of these measurements is suspicious.

from the 'bight'; while the total length of the Caspian from the 'bight' to the 'mouth' or 'sailing-in point' is variously given at 6,000 stades¹ or something over 5,000 stades²; that is to say, the point where the Caspian joined 'ocean' falls *between* the mouths of the Oxus and Jaxartes, and the Jaxartes must discharge into 'ocean.' Now the one thing which is absolutely certain is that the Jaxartes was thought to flow into the same sea as the Oxus, and that sea the 'Caspian'³; so that we now get this far, that 'Caspian' and 'ocean' *may* occasionally be synonymous.⁴ For anything more accurate than this we cannot rely on the measurements; all that I like to say is, that they are not a hindrance to a theory that the Oxus then entered lake Sary-Kamysh.

Now even if Patrocles never saw the Oxus mouth himself, the periplus already cited shews that he thought it possible to reach it, and also the mouth of the Jaxartes; that is to say, he thought that the Jaxartes flowed into the Caspian or some water connected with the Caspian, and (according to the measurements) beyond the narrow strait. In plain English, he treated the Aral as part of the Caspian. What I think happened was, that he spoke so vaguely of the open water beyond the strait, that geographers, with a predisposition to believe in ocean there, were able to misunderstand, and to place the narrow strait outside a united Caspian, instead of, as a fact, between two Caspians.

For (Patrocles apart) that the 'Caspian' sometimes meant the Aral there can be no doubt whatever. Quite apart from the story given by Strabo,⁵ that men, to flatter Alexander, identified the Maeotis that receives the Tanais with the Caspian, saying that this latter also was a lake and that the two were connected, each a part of the other, one Polycleitus (of whom we know nothing) undertook to prove that the Caspian was a lake from the fact *that its waters were sweetish*.⁶ Now wherever Polycleitus got his information, and whatever mistakes men may make, no man in a steppe country ever yet took salt water for sweet;⁷ it appears to be a conclusive proof

¹ Strabo 2, 74.

² Strabo 11, 507.

³ Strabo 11, 507, 510, 518; Arrian 7, 16; Pomponius Mela 3, 5, 6; Ptolemy.

⁴ Is this what Strabo means in 2, 173: τὸν ὠκεανὸν τὸν τε ἔξω καὶ τὸν τῆς Ὑγκανίας θαλάττης? There is no difficulty in the supposition. The list of names of oceanus in Solinus 23, 17, includes Hyrcanus and Caspius.

⁵ Strabo 11, 509: this story must rest upon the real confusion of the European and Asiatic Tanais (Jaxartes). It does read very much like the supposition of a waterway between the Aral and Caspian. Cf. Curtius 6, 12 'ali sunt, qui Maeotiam paludem in id (Caspium mare) cadere putent.' A very clear case of Maeotis meaning the Aral is Polyb. 10, 48: the Apasracae dwell on the middle Oxus and Tanais, the

Oxus entering the Hyrcanian sea and the Tanais the Maeotis.

⁶ Strabo 11, 509, 510: ὑπόγλυκυ.

⁷ Prof. Walther (l.c.) uses this argument about Anthony Jenkinson's journey. Pliny repeats the statement (6, 17 haustum ipsius maris dulcem) on the authority of 'Alexander Magnus' and M. Varro, attributing the fact to the inflow of the rivers. So Solinus 19, 3. Curtius (6, 12) also gives it, as due to the inflow of the Maeotis. The Caspian is salt, the northern section (which is very shallow compared to the rest) being less so than the rest of the sea, owing to the inflow of the Volga and Ural. The Aral is generally said to be only slightly brackish. M. Sven Hedin, however, (*Through Asia*, I, 49), says, that it is too salt to drink, except at the river mouths: 'but

that this piece of information refers to the Aral, under the name of the Caspian.¹

And though we have no description of the Oxus mouth, we have, probably, one very curious allusion to it. Strabo has taken the Araxes story² bodily from Herodotus, and has put it, as did Herodotus, among the Massagetae, marshes islands fish-eaters and all, but *he has altered Herodotus' statement about the mouths*; he says that all the mouths but one fall into 'the other sea' (or, 'the rest of the sea') which is toward the north,³ while the one clear mouth enters the Hyrcanian gulf.⁴ Whether the genesis of this extraordinary confusion can be traced or not, it can only mean that some one had known of and reported the true facts about the Oxus mouth, viz., a great marshy delta on the Aral Sea, and a clear arm falling either into lake Sary-Kamysh or some other point which was understood as being a part of that Hyrcanian gulf or strait up which Patrocles had sailed and which debouched into 'ocean.'⁵

Before quitting this part of the subject, it is necessary just to mention Ptolemy's idea of the Caspian, as he is generally praised for reverting to the true view of Herodotus, that the Caspian was a lake.⁶ To a certain extent this praise is deserved, that is to say, he rightly recognised, as against Eratosthenes and Strabo, that the ocean was not thereabouts. At the same time, so far as his 'Caspian' (egg-shaped, with the longer axis E. to W., and receiving the Oxus and Jaxartes) proves anything, it proves that the Aral and Caspian were confused together, as we have seen already.

Before proceeding to the question of trade, it will be necessary to notice briefly the theory of a southern branch of the Oxus, because, though the physical evidence is all against it, it is often supposed that statements in Greek

lar out in the lake there are said to exist certain fresh-water belts.' I must thank Mr. G. F. Hill for calling my attention to this.

¹ This explains why the Greeks (apparently) never mention the Aral, a fact which has led some to suppose, either that they did not know of it ('Bunbury'), or that it did not exist. They always mention it as something else, Caspian, Maeotis, or (perhaps) Ocean. This view also perhaps throws some light on the confused arrangement of the three gulfs of the Caspian in Pomponius Mela 2, 5: his Scythicus sinus, on the *left* hand as one enters by the 'mouth,' and receiving the Oxus and Jaxartes, must be the Aral. That the Aral *existed* is clear from the Chinese accounts. In A. Wylie's translation of *Notes on the Western Regions*, from the Annals of the elder Han (*Journ. Anthropol. Inst.* 1881 at p. 44), the Yentsai are said to live about 2,000 li N.W. of the Khang-kiu (the nomads settled on the Polytimetus) 'on the border of a great marsh without banks, which is the Northern sea.' Tchang-kien, on whose report this account is based, had per-

sonally visited the Khang-kiu (p. 67); the date is now generally given as about 128 B.C. In the corresponding passage of the Shi-ki of Sze-ma-t'sien ch. 123, T. W. Kingsmill's translation ('Intercourse of China with Eastern Turkestan,' *J.R.A.S.* 1883, vol. 14, p. 80) gives 'a great marsh, without defined banks, covered with reeds, and (communicating with) the Northern sea.' Gigantic swamps (one of 2,000 sq. miles) still exist near the mouth of the Syr.

² Strabo 11, 512, 513.

³ τὴν ἄλλην τὴν πρὸς ἄρκτοις θάλατταν.

⁴ πρὸς τὸν κόλπον τὸν Τρκάνιον. It is clear that this will not suit the Jaxartes.

⁵ Incidentally, this shews the confusion in Strabo's mind as to whether this strait ended in ocean or in some sea: cf. p. 21.

⁶ It is perhaps interesting to note that in the same chapter in which he defines the Caspian as a lake, 'rather like the opposite of an island,' he calls the Peloponnese an island. On the whole, his notions of this part of the world are confused, and inferior to those of Strabo.

writers support it; and should this prove to be the case, it would have some bearing on the general question of how far those writers are trustworthy.

This theory, which is, I believe, supported in Russia by Baron Kaulbars and General Annenkoff, was often advanced by the late Sir H. Rawlinson.¹ He believed that a sheet of water—or rather a basin sometimes water sometimes marsh—existed to the north of or about the present terminations of the Murghab (Margus) and Tejend (Arius)²; that it was fed by a split channel of the Oxus, which issued again from it and followed what is now the railway line and reached the Uzboi N.E. of the passage between the two Balkans; that this river was the Ochus of Strabo, and that this was the route by which trade went; that this river made these districts very fertile, and helped to account for the sudden rise of Parthia.

The historical arguments brought forward by Sir H. Rawlinson in support of his theory are drawn chiefly from mediæval times; with these we are not now concerned. The Greek evidence in its favour, so far as I know, other than that indicated above, is: (1) Strabo says the Oxus flowed through Hyrcania³; (2) Ptolemy makes the Margus join the Oxus⁴; (3) we have mention of a river Ochus, which defies location.

The balance of the Greek evidence, however, appears to be strongly against the theory. The different points are briefly as follows. The theory is inconsistent with what we know of Merv. This town was difficult of approach;⁵ it was surrounded by deserts;⁶ it formed a safe and remote natural prison, in which the Parthians could place the prisoners of Crassus' army. The whole line of this country, Hyrcania, Nesaia, Parthia, was habitually raided across the desert by the nomads, a fact telling somewhat against a great river to be crossed; this desert too is called by Strabo waterless.⁷ Ptolemy's statement about the Margus cannot stand with Strabo's very positive assertion that the Arius, then as now, ended in the sand,⁸ a fact so well known that he uses it as an illustration for the Polytimetus doing the same thing. Herodotus' Akas pool is a fairy tale.⁹ There is no reason to suppose that Strabo's description of Parthia proper as small and unimportant¹⁰ is incorrect. A theory cannot well be founded on the Ochus,¹¹ for Strabo, our

¹ Proceedings *R.G.S.* vol. 20 (1876) p. 178: vol. 1. (1879) p. 161 *seq.* 'The road to Merv'; vol. 4 (1882) p. 355; vol. 5 (1883) p. 14.

² The Aria palus of Ptolemy, the Akas pool of Herod. (3, 117.)

³ Strabo, 11, 509, 518.

⁴ Ptolemy, 6, 10.

⁵ Pliny, 6, 16 *difficilis aditu propter arenosas solitudines.* Solinus 48, 2 has turned this into 'paene inaccessa.'

⁶ Strabo, 11, 516.

⁷ Strabo 11, 511. The desert is *ἄνδρος*. So in the Zend Avesta, the 'plague' of Merv is an evil concourse of horsemen and robbers.

⁸ Strabo 11, 518.

⁹ This appears from the names of the five nations connected with it.

¹⁰ Strabo 11, 514.

¹¹ Strabo's notices of the Ochus (11, 509-511, 518) come to this; it flows through Hyrcania and Nesaia, and near Parthia; and comes from the Indian mountains. Some say it falls into the Oxus, some into the Caspian, after an independent course; some say it flows through Bactria, some that it bounds it. So far as I know, no one else tells any *new* fact about it. But a statement is sometimes quoted from Curtius, to the effect that Alexander crossed both Ochus and Oxus marching from Samarcand to Merv: *e.g.* by Sir H. Rawlinson *Proceedings*

best authority, was clearly unable to get any information about it which was not contradictory. In fact, as far as Strabo is concerned, we are left with two apparently inconsistent statements, one that the Oxus flows through Hyrcania, the other that the Arius ends in the sand. These statements cannot stand together unless we can give to Hyrcania a wider meaning than that which it usually bears;¹ for it is clear that the Oxus, to flow through Hyrcania proper, must intersect the Arius. Perhaps sufficient traces of such wider meaning are found to shew that Strabo's statement about the Oxus flowing through Hyrcania cannot be used, as against his very positive assertion about the Arius, to support the theory of a southern Oxus, and also that it does not necessarily conflict with the theory that the Oxus entered lake Sary-Kamysli.

But after all, the real argument against a southern Oxus, so far as Greek writers are concerned, is to be found, not in their statements, but in their silence. Droysen has already noticed it as strange, that Alexander founded no town at the mouth of the Oxus.² If the Oxus then flowed by Merv and along the northern base of the Kopet Dag, how came it that Alexander, who had just before found time for hill expeditions against the Mardi, found none, if not to explore the river mouth, at least to establish settlements on the river sufficient to secure this valuable frontier, this considerable highway of commerce? On the contrary, while he founded eight, or twelve, cities in Bactria and Sogdiana, and took infinite pains to secure the Indus, he left the Oxus and the rich districts about it so severely alone that it was from here, from Parthia, that the most important reaction against his work

A.G.S. 20 (1876) p. 178. No such march of Alexander's is known, and a reference to Curtius 7, 40 shews that Curtius says he started from Bactria to punish the rebels, on the 4th day reached the Oxus, and then crossing Oehus and Oxus (*superatis deinde amnibus Ocho et Oxo*, one MS. *Oxo et Meo*) reached Margania (*ad urbem Marganiam pervenit*—*Margianam* is only a conjecture). That is to say, he crossed back into Sogdiana after the rebels. Round Margania, says Curtius, he built 6 towns. Margania seems unknown. There seems no need to make even Curtius romance unnecessarily; there is nothing here about Merv or a southern Oxus. All that can safely be said about Strabo's Oehus is that it seems to be a confusion of two rivers, one a Bactrian tributary of the Oxus; the other would be well suited by the Atrek (Bunbury).

¹ There seem to be traces of such a wider meaning in Strabo. 11, 519 he speaks of the 'mouth' of the Caspian as the 'Hyrcanian' mouth; on any theory, it was not in Hyrcania proper. 11, 513 the one branch of the 'Ariaxes' enters the Hyrcanian *κόλπος*, i.e. the narrow

strait (507), between Balkan bay and the Aral. Did 'Hyrcania' follow the 'Hyrcanian gulf'? It would be a tempting conjecture that somewhere in Strabo's sources a confusion had occurred of Gurgān (Hyrcania) and Gurgānj (Orgunje); but there appears to be no real authority for the name Gurgānj till much later. (Dr. E. Sachau, 'Zur Gesch. und Chronologie von Khwārizm' in *Sitz. der K. Akad. der Wiss.*, Wien 1873 vol. 73 at p. 472). Sir H. Rawlinson had conjectured this name for Urva in the 1st Fargard of the Vendidad (verse 38); but see now Darmesteter's trans. in 'Sacred Books of the East.'

² *Hellenismus*, III. 2, 253. Enough is known, perhaps, about Alexander and the towns he founded to make the argument from silence a fair one. It is sometimes stated (e.g. Roesler, 'die Aralseefrage,' *Sitzungsb. der philosophisch-hist. Classe d. K. Akad. der Wiss.*, Wien 1873 vol. 74 p. 186) that Ptolemy places a town Aspalota at the Oxus mouth. It is really put two degrees from it, and much nearer the Polytimetus (Ptol. 6. 14, 2).

started. . . To any one who carefully follows Alexander's work the thing is inconceivable.

This brings us to the last point I wish to notice, viz. :—the evidence for the existence of a trade route from Bactria by waterway down the Oxus and across the Caspian, by which raw silk in particular found its way to Europe. We have in effect three notices of this route; two (from a common source) in Strabo, and one in Pliny, which seems to be quite independent. Those in Strabo have already been dealt with.¹ The passage in Pliny,² given on the authority of M. Varro from information acquired by Pompey's expedition, is a clear one; the Indian trade was carried down the Icarus (supposed to be the Bactrus³ or river of Balkh) into the Oxus and thence into the Caspian and from the Caspian up the Cyrus and so to the Black Sea, to Phasis, with a land journey of only 5 days. As Strabo's account represents information coming from the east of the Caspian, so Pliny's was obtained from the western or Armenian point of view, which may or may not have carefully distinguished how the goods reached the Caspian.

There is no need to multiply modern citations of this route as an ascertained fact, from Hüllman and Lassen to the present day; now and again some doubt has been thrown on it. I give a few recent references.⁴

Now it is quite clear that if as a fact the Oxus never entered the Caspian, Pliny's statement as to trade passing down it into the Caspian requires reconsideration. If, in addition, it should ultimately be proved to be a fact that there never was any waterway between Sary-Kamysh and the western Uzboi, then any goods coming this way would have required to be twice handled in transit, at least, a matter which would have seriously

¹ See p. 19, note 4. In the first passage (2, 73) there cited, Strabo appears to have himself added the word 'easily' to his original, for purposes of controversy, his argument in that part of book 2 compelling him to insist on the fertility and resources of the provinces north of 'Taurus.'

² 6, 17; repeated by Solinus 19, 4.

³ The Bactrus is said to have then reached the Oxus, Strabo 11, 516. Later, a Turkish geographer says that the Balkh river entered the Oxus at Termiedh (Ritter, *Erdkunde* pt. 8 bk. 3, 219).

⁴ Among recent writers, who repeat without comment the statement that goods could be shipped on the Oxus and taken by its ancient course to Balkan Bay, may be mentioned Binnhofer, *von Aral bis zum Gangä*, (1892) who has a good deal about it, p. 129, p. 131-141, and who (*Iran und Turan*, p. 113 seq.) speaks of the 'ungeheuren Transithandels;' Skrine and Ross, *The Heart of Asia*, (1899), p. 315; Tozer, *Hist. of Anc. Geog.* (1897), p. 134. On the contrary, among older writers, who are generally positive about it. Roesler, *die Aralseefrage*

(cited above, 1873), while believing the Oxus reached Balkan Bay, already suggested it was of little importance for trade (p. 215). Sir W. Hunter, *History of British India*, (1899) vol. 1. p. 31-33 has a very guarded statement about this route; his map shews no trade-route to the Caspian by the Oxus, but a land route from Kashgar viâ Merv to Asterabad, thence (1) ship to mouth of Cyrus, (2) caravan through Armenia to Trebizond (3) caravan viâ Euphrates to Syria. Mr. J. Kennedy, 'The early commerce of Babylon and India,' *J.R.A.S.* 1898, expresses, I think, the facts of the case in saying, (p. 242), 'Articles of commerce doubtless passed along this way from early times: but the trade was of little importance, fitful, intermittent, and passing through many intermediate hands,' but he adds 'until the Parthian domination forced trade into this channel.' What is the evidence for the statement about the Parthians? And, *a priori*, why should they try to force trade into a channel entirely *outside* their own dominion or control? See note 5, p. 26.

handicapped the already lengthy Oxus route, whose recommendation (ex hypothesi) was ease of transport. No doubt too each handling would have meant a toll.

I have ventured to think that all that Strabo, or his authority, ever said may have been that goods came down the Oxus to Hyrcania,—an elastic geographical expression. But whether that be so or not, we have in any case to deal with Pliny; and we have two pieces of evidence to set against his express account. One is Strabo's witness that the Caspian, which had never been properly exploited either during the brief Macedonian rule or by barbarians, was unnavigable and unnavigated.¹ The other, somewhat later, is Ptolemy's account of the land road, partly on the authority of the Macedonian Maes, a trader as his father had been before him. Ptolemy gives the whole route,² the road running from Hierapolis on the Euphrates viâ Ecbatana to Hekatompylos, thence northward to Hyrcania and through Aria to Merv, and so to Bactra and thence by the Stone Tower to Sera Metropolis. If the water route had been of any importance it might be expected that Ptolemy would have mentioned it here.

There is also the cardinal argument that Alexander made no attempt to secure this water route: and we may remark, for what it is worth, that there is nothing to shew that (after Patrocles) Macedonian,³ Bactrian,⁴ or Parthian⁵ ever attempted to found settlements or acquire trade along it; or even that the Greeks exploited the trade by means of native agents, as we know was done in the case of the silk route between the Tarim-valley and Bactra.⁶ The enormous size and wealth of Seleucia in Parthian times is some evidence that this city must have attracted a disproportionate amount of trade with the East, so far as it did not go by sea; and the value of the overland trade is also shewn by the wealth that the Aorsi derived from this source,⁷ and by the fact that, at a later time, when the Parthians closed the land routes, the Roman merchants attempted to reach the silk countries by sea.⁸

¹ 11, 509: ἀπλους τε οὖσα καὶ ἀργός. Cf. Pomponius Mela 3. 5, 3: omne atrox, sacrum, sine portibus . . . belluis magis quam cetera refectum et ideo minus navigabile.

² Ptolemy 1, 11 and 12. See Bury *op. cit.* 2, 529 seq. who follows Colonel Yule in thinking that the silk came by this road. Ptolemy does not say so; but he does rather imply that the whole of it was one route; and of course it was the silk route in the portion east of Bactra. Frazer (note to Pausanias 6, 26, 6) says the silk went overland from N. China by Samarcand to the Caspian, citing Ptolemy, 1, 11; this may be correct, but is hardly what Ptolemy says.

³ The mere argument from silence is of little value in this history of scraps and fragments, after Alexander. As to the Macedonians, we have some little evidence in Strabo 11, 509. They had no time.

⁴ No coin-finds, so far as I know. And see

Appendix, p. 23.

The Parthians, a small aristocracy of great slave-owners, did not usually bear a mercantile character: see von Gutschmid, *Gesch. Iran.*, pp. 56, 65: though no doubt glad to enrich themselves by tolls. But the fact that Vardanes, when he pursued a beaten enemy to the Tejend (lower Arius) boasted of having reduced nations who never before paid tribute to an Arsacid, is very much in point here, as shewing what strangers the Parthians had then become in this part of the world (von Gutschmid, *Gesch. Iran.* p. 126).

⁶ Ptol. 1, 11 § 7.

⁷ Strabo 11, 506: ἐχρυσόφορον δὲ διὰ τὴν εὐροπίαν.

⁸ This attempt is known only from Chinese sources, as to which see Dr. F. Hirth, *China and the Roman Orient* (1885), p. 42.

Chinese sources begin to throw some little light upon north-east Iran about the last quarter of the second century B.C., when the emperor Wu-ti sent Tchang-kien as envoy to the Great Yuch-chi, who had just driven the Greeks out of parts of Sogdiana and Bactria, and were encamped on the north bank of the Oxus. He brought back much information about the neighbouring countries, and among other things says of Anhsi (Parthia), which he had not visited personally, 'As the country extends to the Wei (Oxus) river, their traders traverse the adjoining kingdoms both by land and water.'¹ The Parthian rule did not extend to the Oxus, and therefore there is some mistake here, unless the passage be used as evidence for a branch of the Oxus passing Merv; but Tchang-kien did not distinguish peoples much, except as nomads and settled races, and it *may* be good proof of traffic on the Oxus as ascertained by an eye-witness.

More than two centuries later (97 A.D.) the Chinese general Pan-ch'ao sent one Kan-ying as ambassador to Ta-ts'in (Syria), with a view probably to getting into some sort of direct trade communication with its merchants. Kan-ying (I quote from Dr. F. Hirth's translation)² 'arrived in T'iao-chih, on the coast of the great sea. When he was about to take his passage across the sea, the sailors of the western frontier of An-hsi (Parthia) told Kan-ying "The sea is vast and great; with favourable winds it is possible to cross within three months; but if you meet slow winds it will also take you two years. It is for this reason that those who go to sea take on board a supply of three years provisions. There is something in the sea which is apt to make man homesick, and several have thus lost their lives." When Kan-ying heard this he stopped.'

This story is generally referred by older writers to the Caspian, and, if this were the case, would have an important bearing on the question of the trade crossing that sea. There can however be little doubt that the sea in question is, as Dr. Hirth thinks, the Persian gulf, whether we accept all the details of his exhaustive examination of the evidence or not. The mere fact that you first sail south, then make a round at sea and take a northern turn, is alone a very strong argument. I may add one further mark of accuracy in the Chinese account to those given by Dr. Hirth. It appears that before 59 A.D. the Parthian kingdom had been cut off from the Persian gulf by a row of little states;³ now the Chinese account does not speak of sailors of Anhsi, but of sailors of the western frontier of Anhsi. The western boundary of Parthia extended *beyond* the Caspian.⁴

¹ A. Wylie 'Notes on the Western Regions,' *J. Anth. Inst.* 1881, p. 40, cited above.

² 'China and the Roman Orient,' where everything bearing on the question is collected. The passage quoted is p. 39, from the Annals of the later Han.

³ Von Gutschmid, *Gesch. Irans*, pp. 56, 134.

⁴ Hirth p. 146.—See also on this story T. de Lacouperie, *The western origin of Chinese*

civilisation, pp. 222, 226. Among recent writers M. E. Dronin (Art. 'Bactriane' in *Grande Encyclopédie*, p. 1120) still refers it to the Caspian; von Gutschmid *op. c.* p. 138 seq. to the Mediterranean, which is out of the question for quite a number of reasons. There is an odd parallel to what the sailors told Kan-ying to be found in Dionysius Periegetes, who says of the Caspian that you would not cross

On the whole, it appears to me that we are safe in saying that whatever trade came down the Oxus and across to the Caspian was entirely in native hands during the whole period of Greek knowledge of this river; and that it was of no great extent. It would not be safe to assert that any Greek ever set eyes on the Oxus lower down in its course than the confines of Bactria and Sogdiana.

In conclusion, it may be convenient to summarise the views here very tentatively put forward. Patrocles sailed up a gulf of the Caspian stretching towards, but perhaps not reaching, the Aral. He heard of the Oxus and Jaxartes mouths, and of the Aral; that trade came down the Oxus from India to 'Hyrcania,' and that one *could* sail all the way. He thought the Aral joined with and was part of the Caspian, as did Polycleitus, who identifies his Caspian as the Aral by saying that the water was sweetish. Geographers, who thought that the Caspian ought to join ocean, then put Patrocles' strait, not between two Caspians, but outside a united Caspian, leading to ocean, and brought the Oxus and Jaxartes into a united Caspian, as appears most clearly in Ptolemy: the Aral was ignored, and, so far as it ceased to be Caspian or Maeotis, actually became 'ocean'; a glimpse of the truth appears for the last time in Strabo's Araxes story. There is no good evidence for a southern Oxus, nor for an *important* trade route by the Oxus, though some trade undoubtedly came that way. The geographical evidence would on the whole suit best with the theory of the Aral and Caspian being connected; but the state of trade is not inconsistent with goods having to be taken overland from the Oxus and reshipped on that Hyrcanian gulf, down which men 'sailed in'—a long and no doubt a difficult journey.

APPENDIX (P. 26, NOTE 4, THE BACTRIAN GREEKS).

If there had been any considerable trade passing by the Caspian, the Bactrian Greeks would probably have made some attempt to secure it. To secure the silk trade, on which their wealth depended, they extended their rule to the Tarim-valley and conquered to the mouth of the Indus; but their coins, so far as I know, are never found in connection with the Oxus route, outside Bactria and Sogdiana. On the other hand, it is just possible that

it in three months (719, 720); I do not think this has been noticed, but it must be mere coincidence. A missing link in his proof, on which Dr. Hirth and others lay some stress, is that according to the Hou-han-shu the rhinoceros was found in T'iao-chih (in his view Babylonia), and this cannot be proved for Babylonia. If the rhinoceros had once lived here, it would not be difficult to credit its return after the canals began to go to ruin under the Seleucids; and we know that some pachydermata had a very different range in antiquity to the present day: both Theophrastus III.

and Tiglath-pileser I. found wild elephants numerous about the upper Euphrates. But so far there seems to be no proof of the rhinoceros at all, in spite of the fondness of the Assyrians for representing animals; for the 'rhinoceros' of the black obelisk of Shalmaneser II. is an ox (Hommel, *Gesch. Babyloniens und Assyriens* 602, 603), like the 'unicorns' or 'rhinoceros' of Isaiah 34, 7. Is it *quite* certain that the animal mentioned in the Hou-han-shu is a rhinoceros? Anyhow, the same difficulty applies to any other location of T'iao-chih.

they stretched out westward to cover the *land* silk-route. Diodotus already could make his power felt on the Ochus (Strabo 11, 515). In Strabo 11, 517 the names of two satrapies which were taken from Eueratides by the Parthians (and which must be west of Margiana, which remained Bactrian) are given as Ἀσπιωνου and Τυρνια, two meaningless words. For the latter Du Theil read Ταπυρία, comparing Polybius 10, 46 and Strabo 11, 514, and this has been often followed, though Tapuria, on the S. and S.W. of the Caspian, is clearly a geographical impossibility. I believe, however, that the conjecture is right in this, that the three passages conceal a common word. Strabo 514 says that the Tapurians (Ταπίρους) live between the Hyrcanians and Arians; of course they do not. Polyb. 10, 49 says that Euthydemus, holding the line of the Arius against Antiochus, was at Taguria (Ταγουρία). Reiske conjectured Ταπυρία; von Gutschmid τὰ Γουριανὰ (Ptol. 6, 10 giving a city Γουριανή in Margiana) which may be correct, but the article seems unnatural. The latest edition I know (Buttner-Wobst, 1893) reads Ταπουρία.

Now whatever the word is, it occurs a fourth time, in Ptolemy 6, 10, who gives a people Ταποροι (v.l. Ταπουροι), about the lower Arius, and in connection with the desert part of Margiana; Agathodaemon's map puts them near Nisaea. I think all four passages refer to the same people, whose name may have been Ταποροι, or Ταпуροι (perhaps a branch), or some lost name. If so, I would conjecture that the other satrapy, Ἀσπιωνου, conceals the name of the Ἀσταυηνοί, whom Ptolemy 6, 9 gives as near the Caspian, and connected with the Nisaeans (6, 17). Astauene appears later among the Parthian satrapies, having its place in the list between Hyrcania and Parthyene; and the main road from Hekatompylos to Bactra passed through it.

Brunnhöfer 'Vom Aral bis zum Gangä' 1892 p. 61 seq. interprets Ἀσπιωνου (reading Ἀσπιωνο) by the help of Zend as= *in* πῶρος, and Τουριοναν to the same effect, bringing them into connection with the Nisaeans fields, which he appears to place between Merv and Balkh. This raises an interesting question, but foreign to this article.

W. W. TARN.

THE ARGIVE HERA OF POLYCLEITUS.

[PLATES II., III.]

OF all the renderings of the goddess Hera, the gold and ivory statue by Polycleitus in the Heraeum near Argos was the most famous, and was considered by the ancients one of the most beautiful works of Greek art. It certainly held its place beside the masterpieces of Phidias, and is even called by Strabo the most beautiful of all.¹

As in the case of the Zeus and Athene of Phidias, and the Cnidian Aphrodite of Praxiteles, it is most natural that numerous attempts were made in the past to identify this Polycleitan Hera with some extant monument. And, as the most beautiful Aphrodite extant, the Melian Aphrodite in the Louvre, was at once singled out as representing the most famous statue of which there is record in ancient authors, so the famous colossal mask of Hera, known as the Juno Ludovisi, was the first to be identified with the great Polycleitan statue. This identification has been abandoned.² Then followed the so-called Farnese Hera,³ the claims of which were powerfully upheld by Brunn. But though the head in question manifests some Polycleitan characteristics, its identification with the famous Hera by the Argive artist may be said to have been abandoned. In fact it may fairly be said that at the present no extant work of *statuary* is recognised, even as a hypothesis, as representing the famous Argive statue.⁴

¹ Strabo, viii. p. 372. ἐν ᾧ (Heraion) τὰ Πολυκλείτου ἑδῶνα τῇ μὲν τέχνῃ κάλλιστα τῶν πάντων, πολυτελείᾳ δὲ καὶ μεγέθει τῶν Φειδίου λειπόμενα. What the plural here means I am unable to say. It may have included the Hebe by Naucydes placed beside her. We must of course not lay too much stress upon the testimony of Strabo, who does not show himself the most discriminating art-critic.

² Overbeck, *Kunstmonat.* iii. pp. 50 and 83. *Atlas*, Taf. IX. 7 and 8. The Ludovisi is considered by some to be more of the type established by Praxiteles. To me the so-called Hera Pontini possesses more of the characteristics of that artist. Others see in the Ludovisi head features of Lysippian art. This may be so, but there are to my mind survivals of Polycleitan art which might well make this a modification belonging to the Lysippian period

in which traits of the Polycleitan type have survived.

³ Brunn, *Bullet. dell' Inst. Arch. Rome*, 1846 p. 124 seq. *Annali*, 1864 p. 298 seq. Overbeck, *Gr. Kunstmythologie* iii. p. 50 seq., *Atlas*, Taf. IX. 142. Furtwängler, *Meisterwerke* pp. 557 and 76 seq.

⁴ The most recent commentators of Pausanias (Blumner-Hitzig, ii. note p. 566) say: 'Es ist noch nicht gelungen eine statuarische Replik derselben nachzuweisen.' Overbeck, *Gr. Kunstmythologie*, iii. p. 51. 'dass wir nach dem gegenwärtigen Stand unseres Wissens nicht zu sagen vermögen, weder dass Polyklet das kanonische Heraideal geschaffen habe, noch welches die von ihm festgestellten massgebenden Züge dieses Ideals, namentlich was den Typus des Kopfes anlangt, gewesen seien.'

I have had the good fortune to come upon a well-preserved and beautiful marble head in the British Museum, formerly known as Apollo, now as Bacchus,¹ which I believe will be admitted to be a reproduction of the famous Hera by Polycleitus (Pl. II., III. 4). The manner in which many archaeologists to whom I have shown the discovery have unanimously accepted my arguments and demonstration, leads me to hope that the identification will be universally admitted.

When we consider how great and widespread was the influence of Polycleitus on the later generations of artists, so that we can even perceive the survival of the types established by him in extant works of Graeco-Roman art, we must be the more astonished not to find numerous reproductions of his most famous statue, the Hera, especially as such famous representations of the leading divinities can generally be traced in sculptured copies or in works of minor art.

Overbeck is only partly right when he maintains (l.c.) that Polycleitus did not create the ideal type of Hera as Phidias did that of Zeus, and that therefore the Polycleitan type did not survive. The series of Argive coins (to which I shall refer below) and those derived from them show the survival of the Polycleitan Hera type through many generations. On the other hand the fact remains that the type in statuary seems to have developed away from that established by Polycleitus in the fourth century B.C. This is to be accounted for by the mythical significance of the personality of Hera as she was affected by the general current of evolution in the types of Greek gods in the progress of the fifth to the fourth and later centuries before our era. It is not possible for me to enter fully into this interesting and important question of Greek mythology here, and I must defer the treatment of this subject to another occasion. Suffice it to say that the general tendency towards 'rejuvenescence' in the types of gods, which marks the difference between the fifth and fourth centuries of Greek art, only failed in effect when there were definite causes pressing in another direction which did not allow that general tendency to become effective. On the other hand the artistic desire (an expression of the whole complex spirit of the age) for youthful and sensuously beautiful forms was so strong as to lead to the transformation

¹ Greek and Roman Antiquities in the Brit. Museum, 1880, No. 140, p. 62; *Museum Marbles*, xi. Pl. V.; *Specimens of Anc. Sculpt.* i. Pl. 23. Mansell's Photogr. No. 1279.

Restored the neck, the whole nose, excepting top of bridge and half of left nostril; end of foremost curl on her left side as well as same on right side. Band and hair above in front within line of ear. We must ask the question why this piece is *broken out* in that manner. May it not have been a higher portion of stephane with decorated work which was broken or cut away? Moreover the working of the hair behind this and on the crown of the

head is so rough that it points to some more elaborate work from the front having surmounted it originally.

Dimensions —

Height from chin to top of head	·28 mt.
Greatest width taken across centre of the eyes	·225 ..
Depth from back to front	·225 ..
From middle of forehead to end of chin	·17 ..
From end of cheek-bone to cheek-bone	·143 ..
Width between inner angles of eyes	·036 ..
Width of bridge of nose on level of top of eye-lid	·022 ..
Width of mouth	·048 ..

of most types into more youthful renderings, wherever their essential nature admitted of such a transformation (*c.g.*, Apollo, Hermes, Dionysos, Aphrodite, Artemis, Athene). But where the personality of the divinity was, from one reason or another, too strong to submit to such a change—as notably is the case with Zeus—the type established in the earlier century (by a Phidias) was likely to survive in spite of the artistic idiosyncrasies of a Scopas and Praxiteles and the taste of the times they represented artistically.

Now Hera was originally simply a female divinity who presided over the life and fate of the Argive people. She thus was representative of the female type in general and comprised in her nature all womanly characteristics from the virgin¹ to the matron,² from the queen³ to the housewife.⁴ The more the Olympian cycle became organised and the several figures became specialised and individualised in their personalities and functions, the more did Hera respond to that side which represented the spouse of Zeus and matronly queen; while the more youthful and human side was transferred to her daughter and attendant Hebe. Thus, by a singular contrast to the general course of development, with Scopas, Praxiteles and the later artists Hera and Juno are represented as maturer and older, the womanly side, the queenly spouse, being accentuated; while the more youthful and sensuously attractive side, fully and specifically represented by other female divinities, is repressed. Now with Polycleitus the older Argive conception still survived to some degree, and he could therefore include the simpler and more youthful aspects of that female divinity in the artistic type which he established. But it is owing to these complex circumstances that the type of Hera as established by the great Argive artist did not survive in its direct form in the later ages, and that striking modifications were no doubt introduced by Praxiteles and later artists; though some definite features and characteristics as established by Polycleitus survived amid the changes of later times.

I shall now enumerate what material we have had before us concerning the Argive Hera of Polycleitus; what new data for the understanding of the type have recently been furnished, especially by the American excavations of the Argive Heraeum; and I shall then endeavour to show how we may now claim to possess at least one copy of the head in an extant marble bust.

The statue, considered by ancient writers the masterpiece of the great Argive sculptor, was evidently the work of his full maturity.⁵ The temple

παρθενία, Paus. viii. 22. 2; Schol. Pind. *Ol.* 6. 149; Steph. Byz. v. Ἐρμιῶν.

² τέλεια, Paus. i. 1. 4; viii. 9. 1; ix. 2. 5; viii. 22. 2 (ἐς τὴν Στύμφαλον ὠνόμασεν ὁ Τήμενος χήραν); Aristoph. *Thesm.* 973.

³ βασίλεια, Phoron. ap. Clem. Str. i. p. 418; Aesch. *Suppl.* 291; Sen. *Agam.* 349; Appul. *M.* 6. 4; Kaiibel, *Epigr.* 822.

⁴ Preller, *Gr. Myth. Eileithyia*, i. 4 p. 171:

ζύγια, p. 170; suckling, p. 171.

⁵ In an extremely ingenious and interesting paper (*Hermes*, xxxv. 1900, pp. 141 seq.)—with some of the conclusions of which I cannot however agree—Prof. C. Robert draws most instructive inferences concerning the works and the dates of some Greek sculptors—notably of Polycleitus—from a thorough investigation of the list of Olympian victors recently found and

must have been built, and the statue made for it, shortly after the old temple had been destroyed by fire in 423 B.C.¹

From Pausanias,² we learn that 'the image of Hera is seated, and is of colossal size: it is made of gold and ivory and is a work of Polycleitus.' Based on the computations made by the architect (Mr. Tilton) on the ground of the height of the *naós* for the estimate of which our excavations of the Heraeum furnished the material, the total height of the image, including the base and the top of the throne, would be about 8 metres, the seated figure of the goddess herself about 5.50 metres. It is probable that the face, neck, arms and feet were of ivory, while the rest of the figure was draped in gold.

Like the Olympian Zeus of Phidias Hera was seated on an elaborately decorated throne, holding in her left hand the sceptre surmounted in her case by the cuckoo (as that of Zeus had an eagle), and in her right, instead of an elaborate figure of Victory (such as the Athene Parthenos and the Olympian Zeus held) simply a pomegranate. The explanation of the pomegranate Pausanias 'omits as it is of a somewhat mystic nature,' and I am inclined to do the same; though it probably was symbolical of prolific power. Nor need we enter into his hesitating reasons for the choice of the cuckoo. The crown was adorned with figures of Graces and the Seasons. To this point I shall have to refer below.

'It is said that beside the image of Hera there once stood an image of Hebe of ivory and gold, a work of Naucydes.'³ This Naucydes was evidently closely related to Polycleitus, but considerable uncertainty exists as to what exactly his relationship to the older and younger Polycleitus was. Nor does the passage in Pausanias referring to the Hebe clear this uncertainty in any way. For Pausanias himself is evidently in doubt and introduces his mention of the Hebe by the phrase *λέγεται*, only giving it as a report. In the translation above I have adopted Mr. Frazer's rendering: but the passage admits of a different interpretation given by Messrs. Blümner and Hitzig.⁴ According to them the doubt implied by *λέγεται* does not refer to the presence of the statue in the time of Pausanias (contradicted by her presence on later coins) but to the merely traditional ascription of the work to Naucydes. I may add that the doubt may also refer to the identification with Hebe or the Hebe of

published by Messrs. Grenfell and Hunt in the Oxyrhynchus Papyri. He thus gives us the striking new information that the early work of Polycleitus (the Kyniskos) dates back to the year 460 B.C. (p. 188), that he was born about 477 and that he had thus already passed the sixties (?) when he fashioned the Argive Hera. (*Und als er die Hera schuf, war er, wie wir jetzt sehen, mindestens ein Sechziger.* p. 186.)

¹ Thucyd. iv. 133, cf. Waldstein, *Excavations of the Am. Sch. at the Heraeum of Argos*, No. 1. London 1892, p. 3.

² The passage referring to the statue of Hera, ii. 17, 4 reads as follows: Τὸ δὲ ἄγαλμα τῆς Ἡρας ἐπὶ θρόνου κάθηται μεγέθει μέγα, χρυσοῦ

H.S.—VOL. XXI.

μὲν καὶ ἐλέφαντος, Πολυκλείτου δὲ ἔργον· ἔπειτα δὲ οἱ στέφανος Χάριτας ἔχων καὶ Ὄρας ἐπειργασμένας, καὶ τῶν χειρῶν τῇ μὲν καρπὸν φέρει, τῇ δὲ σκῆπτρον κόκκυγα δὲ ἐπὶ τῷ σκῆπτρῳ καθῆσθαι φασί. Λέγεται δὲ παρεστηκέναι τῇ Ἡρᾷ τέχνη Ναυκύδους ἄγαλμα Ἡβης. ἐλέφαντος καὶ τοῦτο καὶ χρυσοῦ.

³ For the literature on this subject see Frazer, *Pausanias*, Notes to vi. 2; ii. 22, 7; vi. 17, 5. Robert *Hermes*, xxxv. (1900) p. 190 seq. makes Naucydes the brother of the elder Polycleitus.

⁴ *Pausanias Graeciae Descriptio*, i. 2nd Part, p. 567 (Note to p. 423, 18).

Naucydes. It is certain that some hesitation existed in the mind of Pausanias or his informant.¹

This description of the statue, however imperfect, gives a fair idea of the general composition and arrangement of the famous statue. We are much helped in forming such an idea by ancient coins. Foremost among these is the Roman Imperial coin of Antoninus Pius² (Pl. III. No. 9), which shows us Hera seated on the throne in the attitude described by Pausanias, as well as Hebe by her side and a peacock between the two. The same figure is rendered on a slightly larger scale (the Hebe and peacock being omitted) on similar coins³ of about the same date (Pl. III. Nos. 8, 10). Attitude, attributes and drapery become clear to us, though we must of course always remember that renderings of colossal statues on such coins can only give an idea of the general composition and broad details, while they are generally quite inadequate for the rendering of the artistic character of a great work. I shall refer to the peculiar 'turreted' crown on these coins below.

But it must be admitted that we approach comparatively near to some idea of the artistic character and style of the head in the fine specimens of autonomous Argive coins⁴ (Pl. III. Nos. 1, 5-7) dating from about the same period as the erection of the great statue by Polycleitus. Here the head merely is given and on a comparatively large scale. Most authorities have long been agreed that in this coin we have a direct relation to the statue,⁵ while Furtwängler⁶ considers the coin to be a direct copy. We can further-

¹ I have consulted on this point my colleague Sir Richard Jebb, who has kindly sent me the following note on the passage, which, I am happy to find, confirms what I had myself suspected.

'The words could mean :

(1) 'An agalma, which stands by the Hera, is said to be one of Hebe, the work of Naucydes.'

In this case, the doubt implied would refer to the subject, as well as the author, of the agalma.

Or: (2) 'An agalma of Hebe etc. . . . is said to be the work of Naucydes.'

The doubt would then refer to the authorship only.

If Pausanias meant: 'It is said that an agalma of Hebe, the work of Naucydes, once stood by the Hera,' he ought to have written (1) *παρὰστῆναι ποτε*, or (2), if he meant *παρεστηκέναι* to be the inf. of the *pluperf.*, *παρεστηκέναι ποτέ* (or some similar adverb).

As the text stands, *λέγεται παρεστηκέναι* would naturally mean 'is said to stand.' From the words, *ἐλέφαντος καὶ τοῦτο καὶ χρυσοῦ*, I should rather infer that Pausanias had the agalma before his eyes; but this point cannot be pressed.

παρὰ δ' αὐτήν Does this refer to (1) the

"*Ἥρα*, or (2) the "*Ἥβη* whose agalma has just been mentioned? The latter would be the more natural.'

² Imhoof-Gardner, *Numism. Comment.*, etc. (*Journal of Hellen. Stud.* 1885; Pl. LIV. (I) No. xv; Berlin *Münzcat.* i No. xii, xiii, xv.; Frazer, *Paus.* iii, p. 185, Fig. 30; Blumner-Hitzig, *Paus.* i, 2nd Part Taf. xvi., No. 20. Overbeck, *Kunstmyth.* iii. Münztafel iii. No. 1.

³ Imhoof-Gardner, *ibid.* No. xii, xiii., *Brit. Mus. Catal. of Gr. Coins*, Pelop. Argos, No. 156; Head, *Historia Numm.* p. 367; Frazer, *ibid.* p. 184; Blumner-Hitzig *ibid.* No. 18. Overbeck, *Kunstmyth.* iii. Münztafel iii., Nos. 2 and 3.

⁴ *Brit. Mus.* Argos, Nos. 33, 34, 37, 35 and 40, 41; Imhoof-Gardner, *ibid.* No. xiv.; Overbeck, *ibid.* Münztafel, ii. No. 6; Percy Gardner, *Types of Gr. Coins*, Pl. VIII. No. 13; Blumner-Hitzig, *ibid.* No. 23.

⁵ Blumner-Hitzig, *ibid.* p. 566. '*Dafür ist fast allgemein angenommen dass der schöne autonome Kopf argyrischer Didrachmen, die eben aus jener Zeit stammen, aus eine gute, wenn auch nicht absolut treue Vorstellung von dem Typus der polykletischen Hera geben.*' But cf. Overbeck, *l.c.*, p. 44.

⁶ *Meisterwerke*, p. 413.

more trace this type, with slight artistic modifications in detail, on Argive coins (e.g. Pl. III. No. 2) for more than a century, and for a still longer period throughout the whole of the ancient world,¹ in Elis (Fig. 3, p. 44), Himera, Cnossos (Pl. III. No. 3); and this shows that Overbeck's statement as to the failure of Polycleitus to fix the type (see *supra*) needs modification at least as regards coins. We shall have to consider this coin more in detail as we proceed. (See note, p. 44.)

In spite of our good fortune in possessing, as regards the Hera type of Polycleitus, so fair a description in Pausanias and coins of such exceptional beauty and clearness in the rendering of the head, we should still be far removed from an adequate idea of the artistic style and character of the great statue and even of the head alone with only these materials before us. To attain this we require the evidence of the individual style of that artist as manifested in some work or works of sculpture on a larger scale or in adequate copies of these made in the Classical period. Our idea would be still more adequate if we could identify any extant statue or bust with the Argive original. Yet, as I have always maintained in similar cases, we are most likely to attain this latter consummation, if we succeed in making ourselves fully cognisant of the Polycleitan style in all the other works identified with that master, and widen the field of our enquiry from this the safest point of departure.

Now since Friederichs' beautiful identification,² we have with Polycleitus an exceptionally clear case, in that the statues of the Doryphoros and Diadumenos have long been identified with comparative certainty as illustrating all the definite characteristics of Polycleitan style which ancient authors³ have handed down to us. The number of replicas of these statues is continually increasing; and, especially as regards the heads, we have now so large a series⁴ that their chief characteristics are easily recognisable by even the apprentice in archaeological study. Some of the heads in the several statues of the Ephesian Amazon,⁵ though they show deviations among each other, reproduce the leading characteristics which we recognise in the Doryphoros and Diadumenos. But it is the merit of Professor Furtwangler to have recognised in the head of the Doryphoros-type the earlier, and in that of the Diadumenos-type, the later style of the same artist, Polycleitus.⁶

But our data for such an archaeological induction have become more

¹ Overbeck, *l.c.* Münztafel, ii.

² K. Friederichs, *Der Doryphoros des Polyklet*, Berlin, 1865; see for criticism of this, O. Rayet, *Monuments de l'Art Antique*, i., on Pl. 29.

³ Cf. Overbeck, *Die Antiken Schriftquellen*, etc. p. 170, Nos. 952-964; p. 173, Nos. 967-977.

⁴ See the chapter on Polycleitus in Furtwangler's *Meisterwerke*, etc. (*Masterpieces*, etc. translated by Eugénie Sellers).

⁵ Michaelis, 'Die sogenannten Ephesischen Amazonenstatuen,' *Jahrbuch d. Kaiserl. Deut-*

schen Arch. Instit. Berlin 1887, i. pp. 14, *seq.* Robert, *op. cit.* p. 190, considers the various types probably all to be Polycleitan, and thinks the 'Berlin' type to have been made between 450 and 440, the 'Capitoline' between 430-420 B.C.

⁶ *Masterpieces*, etc. p. 243. It is in no sense to diminish the merit of his discovery and his full claims to it, but to confirm it, if I say that I had independently come to the same conclusion about the earlier and later style of Polycleitus in the Doryphoros and Diadumenos.

than doubly increased and made doubly secure, by the discovery of numerous and important fragments of the sculptured metopes from the Argive Heraeum in the excavations of the American Archaeological Institute and School, over which I presided from 1892 to 1895. Among these are at least nine well preserved heads, one of which might be called a replica of the Doryphoros head, while all of them illustrate and exemplify in the fullest manner the characteristics of Polycleitan heads as we have hitherto recognised them. These sculptures, moreover, in every respect bear the same relation to the great Argive master of the Hera, that the Parthenon marbles bear to the great Attic sculptor of the Athene. Yet, while in the case of Phidias we have no Doryphoros or Diadumenos to give us such well supported material for the appreciation of his peculiar style with which we could confront the Parthenon marbles, the sculptures from the Heraeum verify and supplement the information which the Polycleitan works hitherto identified have yielded. And yet the archaeologist who now would wish to disprove the Phidias character of the Parthenon marbles, to which every circumstance points *a priori*, would find himself confronted with a very difficult task.

It was an unwarrantable assertion of Professor Furtwängler to deny the relation of these Argive sculptures to Polycleitus,¹ even before he had seen them and before some of them had been discovered, and I hardly believe that the grounds, both positive and negative, upon which he based his denial will bear serious consideration. In the future our study of Polycleitan style will have to take its start from the Doryphoros and Diadumenos in conjunction with the marbles which we found at the Argive Heraeum. Moreover it was only in taking this stand, and on the ground of the wider knowledge of Polycleitan characteristics thus acquired, that I was led to the present identification of the Polycleitan Hera.

As regards Polycleitan heads we find that, in spite of the differences which obtain between the Doryphoros and Diadumenos, and still more among the varied subjects, male and female, of our Argive metope-heads, certain broad and distinctive characteristics remain common to them all. These are:—

(1) The general outline and composition of these heads is quite distinctive. The character of the *quadrata signa*, as we knew it in the massive types of the Doryphoros and Diadumenos, is markedly maintained in the whole build of the head, naturally, in the simplest and most pronounced form, in the earlier Doryphoros head with its short closely fitting hair, in no

¹ First (in 1893) in the *Archaeolog. Studien* H. Brunn *dargebracht*, repeated *Masterpieces*, p. 223. I have dealt exhaustively with this question in the forthcoming official publication. How any trained archaeologist could have considered the small marble head which Furtwängler compares with the marble head of 'Hera' from the Heraeum, which I first published in 1892, and find any resemblance is to me incomprehensible. The only point of contact

is a superficial similarity in the curious braid on the top of the head which Furtwängler's head has in common with the Heraeum head as well as with the 'Karyatides' from the Erechtheum (and it is probably upon this that he and some others have seen an Attic character in the Heraeum head). His original attribution of his small head (now unwisely discarded by him) to the style of the Olympian pedimental figures, is much nearer the mark.

wise interfering with the general structure of the head. This squareness of outline is so marked that we might almost say that each one of these heads would fit into a square with the slightest possible amount of interval between this square and the points where the modelling of the features required the cutting away of the marble; and it is so distinctive that it can readily be contrasted with the more oblong, triangular or pear-shaped, or round ball-like outlines¹ which characterise the heads of some other schools. If this is the case in the front view seen in full face, it is also, even more markedly, so in the profile view. The whole of this characteristic, borne out and accentuated in other phases of this artist's work the more we follow them, seems to point not to a mechanical procedure, but to an extreme desire for succinctness and accuracy—if I may say so—the very reverse of the vague and sketchy methods and tendencies of the impressionists. We thus also find that, with the several parts of the face, the broader phases of structure are emphasised in their distinctness in masses, such as the upper part of the face above and below the eyes, from the beginning of the hair at the sides upwards to the top, and again the line from cheekbone to chin on either side. Within these again the brow and forehead in their relation to the hair; the intermediary straight section of the region of the eye, between the upper part and the lower part—and so again each subdivision.

(2) The general impression which this outline structure of the heads gives, is still further impressed by the effect of the *ensemble* of all the features. It carries on the general impression in the rendering of the bodies of these *τετράγωνοι* athletes; it is that of weightiness if not of heaviness. There are none of those softer, rounder lines in the female heads, such as we find in Attic contemporary work, *e.g.*, the Karyatides from the Erechtheum—structure is never hidden to produce the effect of rounded softness. And the features carry this still further in the impression of solidity, verging upon the stolid and the pouting, even in the most advanced types of the Diadumenos, and the exquisite beauty of line and form of some of the female heads. This expression is no doubt due to some extent to the massive and firm treatment of cheek and chin; but it is especially conveyed by the characteristic rendering of the nose and the mouth.

The nose in the profile view does not follow the line of the forehead in a simple sweep, but shows a gradual advance at a very obtuse angle, while the tip extends far down and comes slightly lower than the level of the edge of the nostril. In the front view the nose appears short in relation to its breadth. Throughout its whole length it retains a comparatively great breadth from bridge to tip. There is a slight increase of breadth about the middle part, so that it appears slightly narrower at the bridge and immediately above the tip. The tip again, well rounded, is as broad as the widest part in the middle of the nose. Compared with this uniform breadth along the bridge to the tip the nostrils do not extend widely on

¹ See my article on 'A Head of Polycleitan Style etc.' in *American Journal of Arch.* ix. (1894) p. 334.

either side—which fact again tends to accentuate the breadth of the nose itself.

Perhaps the most characteristic feature of all, and one to which the peculiar expression of these heads is chiefly due, is the mouth. This is never firmly closed, in some of them slightly opened. The lower lip protrudes slightly, and seems tilted over with a marked curve below where it joins the chin, presenting a comparatively thick and compact mass. In addition to this protruding lower lip the upper lip is exceptionally short (most noticeable in the profile view) and what represents the red portion of the lip is widened out on either side, preserving this width to a certain degree even at the corners. The total effect is that of heaviness, almost a pout.

The eyes are treated in a simple manner, the brow extending in one broad sweep from the bridge of the nose to the temple, which line, together with the breadth of the bridge, gives the eyes themselves a broad setting. The well marked upper lid runs almost parallel to the brow; while the lower lid, though firmly chiselled, is not accentuated by a soft hollowing out below it—which in many heads of the fourth century adds so much sentiment and softness to the expression. The orb itself is widely oval, gently curved and slightly slanting inwards in a downward direction. I have dealt exhaustively with the treatment of the hair and the general modelling of texture in the forthcoming official publication of the excavations at the Argive Heraeum, and as this does not concern the definite question before us, I need not enter into it here.

When arranging the casts in the Fitzwilliam Museum of Archaeology here at Cambridge, I naturally desired to bring the works of the same school and period together as far as possible. In the case of unidentified works I endeavoured to place them among the classified works to which they bore the closest relationship of style. It is thus many years ago that I recognised in the head of 'Bacchus,' formerly 'Apollo,' in the British Museum (Pl. II., III. 4) characteristics of Polycleitan art; for it was among these heads that the so-called Bacchus found his place. This conviction grew more firm and definite when, in preparing the final publication of the marbles from the Argive Heraeum I had to study the characteristics of that art with greater minuteness, and, among other comparisons, confronted the head from the British Museum with the casts of the Heraeum heads which I had brought from Argos. This was especially the case when the life-size 'Hera' head from the Argive pediment was compared with the British Museum head in the profile view. I felt more and more convinced that the 'Bacchus' was Polycleitan, and at the same time I began to doubt whether it really was a male head.¹ In spite of the restoration of the nose (the restorer has followed the

¹ The mistake as regards the sex of the head—especially with the restored neck which the 'Bacchus' had—is not a grave one and is easily incurred by any archaeologist, when an antique head (especially with such short hair) is severed from the body. In such cases doubts

must often be felt. I need merely remind the reader that the beautiful head at Bologna which Furtwangler has so ingeniously restored to the Athene at Dresden and which he with much probability identifies with the Lemnian Athene of Phidias, was held by several authori-

extant indications of the broad bridge in a very skilful manner) and of slighter restorations of the hair on the top of the head, the characteristics of Polycleitan art which I have just endeavoured to enumerate were well illustrated in this head.

Hitherto I chiefly studied this beautiful bust from the front view. When now I began more carefully to examine the profile view I felt convinced that there existed some other work with which I had been familiar to which this bore the closest analogy. What made it difficult to recall this analogous case was that it was not a work of sculpture in the round, a bust on a large scale, or even a sculptured marble relief. One day, however—a common trick in the action of memory—the instance I had looked for suddenly occurred to me; and, upon examining the coins, I found that it was in truth the autonomous tetradrachm of Argos reproducing the head of the famous Hera of Polycleitus.

If we bear in mind the reduced size of such a coin as compared not only with the colossal original, but even with a life-size marble head, and place the two side by side, the marble in its profile view (as is here done on Pl. III.), it at once becomes evident that both are reproductions of a common type. From this type the marble head no doubt shows some modifications and deviations, such as the reduction of the diadem to a narrow band without ornament. Such modifications were also necessarily introduced into the rendering of the coin, however marvellous this may be in the retention of some of the grand qualities of the famous original from which it was copied.

What makes the marble head in the British Museum appear so singular and unique is, in the first place, the treatment of the hair. This, together with the wrongly restored neck, was no doubt the chief reason why the head has hitherto been mistaken for that of a male divinity. This peculiar, almost unique treatment of the hair, in longish curls, though far from the length usual in ancient female figures, which only occurs to me in a few early instances (none to my knowledge later than the fifth century B.C.), we find again in the head of Hera on the contemporary Argive coin. It is moreover interesting to note how on the later modifications of the same coin (Pl. III. No. 2) the antiquated fashion of this short hair is replaced by a longer braided hair of the ordinary female *coiffure*.¹ The only instances of female hair similar in length which I can recall are the case of the Demeter on the famous Eleusinian relief² and of the Sterope from the eastern pediment of the temple of Zeus at

ties to be a male head. I also take this opportunity of stating that the authorities of the British Museum (who gave me every assistance in my research) could not be expected to discover the nature and attribution of the head. In the reproduction given here the female character of the head is made more obvious by the fact that the modern (male) neck has been omitted. We can as little expect that the officials of Museums should make all the dis-

coveries concerning the objects in their care as that librarians should anticipate all the discoveries made by students in the manuscripts and books in their library.

¹ See Overbeck, *ibid.* Monztafel, and Percy Gardner, *Types of Gr. Coins, &c.*

² The best illustration in Brunn *Denkm. Gr. und Röm. Sculpt.* Pl. VII. See also Collignon, *Hist. de la Sculpt. Grecque*, ii. p. 141, Fig. 68.

Olympia.¹ Also one of the so-called Dancing Maidens from Herculaneum in the Museum of Naples.²

But though these heads have hair similar in length, the analogy in the arrangement is much more striking and complete in the case of the Argive coin. In the coin as well as in the marble head the hair runs over the forehead to the temple in three well defined waves³ (more minutely subdivided by further modelling in the larger marble head); while on the side, from the temple to the back of the head, there are again four well defined curl-like subdivisions in larger masses which are again subdivided by smaller wavy modelling. Though thus there naturally is more indication of detail in the rendering of these curls in the large marble head than on the coin, the die-sinker appears to me on the whole a greater artist—a better sculptor—than the copyist in marble, especially in the manner in which he has been able to transfer into his reproduction the character of the metal work, which is to a greater extent lost in the coarser marble technique. To appreciate the close analogy in this unique rendering of the hair in these two heads it is well to recall that the end of the side curl nearest the temple is broken away in the marble.

The line of forehead and brow, the treatment of the eye (always allowing for the difference of technique and size) are the same. Though the nose is restored in the marble, its profile direction is prescribed by the extant portion of the bridge, and the relation of its outline to that of the forehead is thus in both cases the same. Evidently the restorer has not given sufficient prominence to the tip of the nose (and for this some of our Heraeum heads with perfectly preserved noses will serve as models). But the mouth, with the short upper lip and the projecting lower lip, is the same. Still more marked is the characteristic square outline of both heads taken as a whole when viewed in profile.

The most noticeable discrepancy in appearance is caused by the different treatment of the diadem in these two cases. The marble copyist evidently shrank from the attempt of rendering the diadem decorated with the Graces and the Seasons in the original, and thus merely furnished his head with a plain band, which, being thus unornamented, he was forced to reduce in size. The die-sinker was somewhat more ambitious. Instead of the full decoration with Graces and Seasons he kept the diadem broader and decorated it with a delicate honeysuckle pattern, the anthemion. Percy Gardner⁴ has put forward the hypothesis that 'the flowers with which the stephane of Hera is adorned are an abridged symbol of the horae and charites, which figures were introduced in the same place by Polycleitus.' It seems to me more likely that the gold and ivory Hera had this very anthemion pattern on the band portion of her crown. And, by analogy with Phidias's statue of the Olympian Zeus (in which these Graces and Seasons placed at the upper end

¹ See Olympia, Treu, *die Sculpturen*, Tafelband iii. Pls. X and XI.; also Collignon, *op. cit.* i. Pls. VII.-VIII

² Rayet *Monum. de l'Art Gr.* i Pl. 39;

Brunn, *Denkm. Gr. und Röm. Sculpt.* No. 294 first from our left, No. 295 first from our left.

³ See note, p. 44.

⁴ *The Coins of Elis*, p. 19.

at the back of the throne appeared to wind round the head of Zeus) these same figures would on the crown of Hera form the upper summit and completion. Now if we examine the copper coins representing the whole figure of Hera on her throne with all her attributes, we find that she wore what looks like a 'turreted' crown (Pl. III, Nos. 8-10). This may of course be a modification introduced by the later die-sinker. But as he appears to be so accurate in all the other details, such an act on his part must seem strange to us. I do not believe that the mural crown occurs as early as the fifth century B.C. Now if we examine the Argive coins with Hera we must realise that the upright points which make the crown look 'turreted' are not at all distinct.¹ The question may therefore be fairly asked, whether these points do not represent upright figures worked in the round or in high relief on the top of the diadem.² In this case the Graces and Seasons would have projected above the band of the diadem in the round or in bold relief; and the die-sinker of the earlier autonomous coin, in whose rendering of the head the details were on a more elaborate scale, had to omit the rendering of such minute figures (indistinctly given by the points of the later Roman die-sinker) and remained content with the rendering of the ornamented band only.³ The following seem to me the possible arrangements of the Graces and Seasons on the stephane of the Argive Hera. (1) Either the Graces and Seasons were worked above the gold band *in the round*, and then the upright masses would have been the die-sinker's indication of these; or (2) they were worked *in high-relief* on upright projections which are rendered in the late coins without the reliefs; or (3) they projected between the flowers of the anthemion in high relief (as the winged horses on the coins with Juno Laetitia of Pandosia and Croton)⁴ on a very broad gold band, the stephane. At all events it does not seem to me likely that the die-sinker would have represented the battlements of the mural crown by the high projections on these coins with Hera. It is also interesting to note (a fact to which my friend Mr. Cecil Smith has drawn my attention) that Hera is distinguished, on a beautiful red-figured vase of the fifth century, B.C.⁵ from Athene and Aphrodite in the Judgment of Paris, by an elaborate stephane ornamented with flowers on the top of which a winged horse projects in the round,⁶ while, on an elaborate high head-dress from a terracotta figure from Cyprus, above the flower band, are sphinxes in high relief.⁷

¹ Mr. G. F. Hill has drawn my attention to the fact that the prototype of these points is to be found in the points which are visible with the lens, if not with the naked eye, on all the early autonomous tetradrachms of Argos: in Pl. III., they are to be discovered, three in number, standing out from the top edge of the crown.

² If this was so the words *ἐπεσσι* and *ἐπεσπ-γαμμένας* used by Pausanias would be the appropriate words for a diadem so ornamented.

³ Dr. Dressel of the Coin Department of the

Berlin Museum informs me that Dr. Imhoof-Blumer considers the crown on these coins to be the mural 'turreted' crown.

⁴ *B.M. Cat. Italy, Croton*. No. 88; Pandosia, No. 2.

⁵ C. Smith, *Cat. Gr. and Etr. Vases, Brit. Mus.* iii. p. 195, E. 257 (a).

⁶ See also the Hera on a vase quoted by Mr. Smith, from the *Elite Céramogr.* i. Pl. 29.

⁷ Terracotta in the Brit. Mus., No. C. 102.

The whole question of the distinctive crown of Hera and Juno ought to be dealt with more exhaustively than I can here do, and would make an interesting monograph. What appears to me clear, however, is that the coins we are discussing have not mere representations of the late mural crowns; but have some reference to the decoration of Hera's diadem as described by Pausanias. But to return to the anthemion ornament.

It is certainly more than a mere coincidence that the pattern as here given is to be found in nearest approximation on the ornaments of the very temple in which the great statue stood—namely, the Argive Heraeum which we have excavated (Fig. 1).¹ This, by the way, confirms our belief in the close relationship between the sculptured work of the temple and the statue it contained: i.e., the common patterns and styles of the one Polykleitan workshop. If we study the natural history of this pattern throughout Greek art² we find that the delicate low relief with the wavy, horizontal lines is to be found first in the Parthenon, and then in these most beautiful specimens from the Argive Heraeum; that this is followed by its rendering in the Erechtheum of Athens (which shows a close relationship to the Argive



FIG. 1.—FRAGMENT OF MARBLE SIMA FROM THE ARGIVE HERAEUM.

pattern in that, in one instance,³ it even reproduces the bird, but which, being at least ten years later, marks a further step in conventionalisation in that the flowers are more upright and closer together). Next we may mention the Tholos of Epidauros with deeper undercutting and bolder relief, fuller in line—in short more ‘Barocco;’ then the temple of Artemis at Ephesus, then the Mausoleum of Halicarnassus, etc., etc.⁴

Nay, the analogy may perhaps be much closer still. On the specimen of the Argive tetradrachm here reproduced (Pl. III. No. 1), there is, above the volute of the pattern, a small projection rising obliquely upwards, which is not sufficiently distinct to show any drawing. This may be simply the result of a flaw in the die.⁵ But the other specimens of the coin have some peculiar

¹ Cf. Waldstein, *Excavations*, etc. Pl. VII.

² One of the students of our Cambridge School will shortly publish a more elaborate treatment of the development of this pattern in the successive stages of Greek art, especially in the Simae of Greek temples. According to Furtwängler the acanthus was first introduced

into Attica in the Erechtheum.

³ Penrose, *Principles of Athen. Archit.* 2nd edit. ch. x.; Yorke, ‘Balustr. of Athena Nike,’ *Journ. Hellen. Stud.* xiii. (1892, 3), note to p. 273.

⁴ See note, p. 41.

⁵ Dr. Imhoof-Blumer considers it such.

form of rise or thickening at this same point—so Nos. 5 and 6, in the same Plate. May this originally have been a bird, such as constitutes so distinctive a feature in the anthemion on the Sima of the Heraeum? Or may it not mark the point where the die-sinker originally worked his die to fashion the bird as in the other Argive pattern, and finding he could not render it adequately on so small a scale, gave it up, a hollow however here remaining in the die, of which subsequent attempts at repair could not remove all traces? The recurrence of unevennesses at this point in several specimens distinctly points to this. This detail in no way affects the main argument as to the similarity of the anthemion pattern as a whole; but as a possibility, in view of the curious protuberance on a set of coins from one die, it had to be mentioned here.

At all events this close approximation in subject and style of ornament between the gold and ivory statue of Polycleitus and the carved decoration of the temple is very interesting and may be important as not only confirming the directness of relation which existed between the marble-workers of the Heraeum (*a fortiori* the sculptors of the Metopes) and the master of Hera, Polycleitus; but also in its bearing upon the general relation between the architectural sculptures of a temple and the great statues which they contained.¹

If now we turn from the profile to the full-face view of our marble Hera, the simple, broad and noble character of this head bears out the principles of Polycleitan art and style to which I referred. We have the square outline of the whole, the distinctness and articulation of the different sections of the face, and the peculiarities in the simple features, in spite of the restoration of the nose and some damage to portions of the lips.

There remains one striking feature which gives a distinctive character to this head, namely, the way the hair from the temples downwards is, as it were, lifted away from the face, as if it were made of separate and different material.² This accentuates the difference of texture between face and hair and, in spite of the broad, firm modelling of the face, gives its surface a touch of softness—as of ivory framed by gold. The head may give us some faint notion of the effect of the chryselephantine technique. In other respects also, in the firm, broad modelling and the sharp lines (note the firmly cut edge



FIG. 2.—TERRACOTTA HEAD FROM THE ARGIVE HERAEUM.

¹ In a paper which I have just sent to press, presenting the discovery of some reproductions of pedimental figures from the Parthenon, I am dealing more fully with this question.

² Cf. the head published by Eugénie Sellers, *Journal Hellen. Stud.* xiv. (1894) pp. 198 seq. Pl. V.

of the upper eyelid), we believe we can recognise the art of a master in *acclatura*.

I would finally draw attention to a very important piece of evidence bearing upon this question. Among the few terracottas dating as late as the fifth century B.C., which we found in our Argive excavations (few in comparison with the many hundreds of an earlier date) there is one head, only half of which is extant, the largest terracotta head we there found (Fig. 2). It is evidently a work of the fifth century and bears more marks of being copied from a great work than any of the others. The extant features of the face distinctly show the Polycleitan characteristics, especially in mouth and nose, though we must take into account the inferiority of the coroplast and the limitations enjoined by the material and the customary degree of finish given to such figurines. This of course applies also to the modelling of the hair. But with this reservation and in spite of the rough sketchy modelling of the hair, the principle of its arrangement and treatment is the same as in our marble head from the British Museum. The band of the diadem can be seen above the hair on the side; while the hair below it falls down in wavy masses like curls and is in the same characteristic manner set off and 'undercut' from the face. I venture to hold that this terracotta head is an attempt at a direct copy of the famous Argive Hera by Polycleitus.

CHARLES WALDSTEIN.



FIG. 3

NOTE.

I have compared the marble head only with the Argive coin to avoid confusion; but I should like, as an appendix, to draw attention also to the coins of Elis (Fig. 3) which Prof. Percy Gardner places between the years 420 and 400 B.C., and which he rightly maintains convey some idea of the Polycleitan Hera. In some respects these coins, with the large and heavy features, reproduce the characteristics of Polycleitan style even more markedly than those of Argos; though I do not believe that their execution is finer. The hair is the same in the treatment over the forehead, while the method of rendering the 'curls' over the neck varies in distinctness,—it is certainly not the usual long braided hair. This modification does, however, take place in the next century (Gardner, *ibid.* Pl. XIV, 2a, 1, 3, 2b) when the later *coiffure* is adopted. The diadem in the best of these Elean coins is ornamented with the same pattern and is to be found even in specimens of the fourth century. But the freedom of the die-sinker is shown in the way he has introduced modifications, in some even substituting for the scroll between the flowers letters reading *Ἡρα*.

TWO NOTES ON SOPHOCLES.

I.—THE TOPOGRAPHY OF THE ABDUCTION INCIDENT IN SOPH. *Oed. Col.*

I HAVE lately spent some time in the locality in endeavouring to ascertain the true meaning of the passages concerned, which are as follows :

L. 897. οὐκουν τις ὥς τάχιστα προσπόλων μολῶν
πρὸς τούσδε βωμοὺς πάντ' ἀναγκάσει λεῶν
σπεύδειν ἀπὸ ῥυτῆρος, ἔνθα δίστομοι
μάλιστα συμβάλλουσιν ἐμπόρων ὁδοί,
ὥς μὴ παρέλθωσ' αἱ κόραι.

L. 1019. ὁδοῦ κατάρχειν τῆς ἐκεῖ, πομπὸν δέ μοι
χωρεῖν, ἵν', εἰ μὲν ἐν τόποισι τοῖσδ' ἔχεις
τὰς παῖδας ἡμῖν, αὐτὸς ἐνδείξῃς ἐμοί·
εἰ δ' ἐγκρατεῖς φεύγουσιν, οὐδὲν δεῖ πονεῖν.
ἄλλοι γὰρ οἱ σπεύδοντες, οὓς οὐ μήποτε
χώρας φυγόντες τῆσδ' ἐπεύξωνται θεοῖς.

L. 1044. στ. εἶην ὅθι δαΐων κ.τ.λ.
. . . . ἢ πρὸς Πυθίαις
ἢ λαμπάσιν ἀκταῖς
ἐνθ' οἶμαι κ.τ.λ.
. . . . τούσδ' ἀνὰ χώρους·

ἀντ. ἢ που τὸν ἐφέσπερον
πέτρας νιφάδος πελώσ'
Οἰάτιδος ἐκ νομοῦ·
ἀλώσεται.

Three commentators, a Scholiast, Col. Leake, and Sir R. C. Jebb, have devoted some attention to this matter, the two latter following the first, in part or altogether, in conclusions, with which I find myself at variance. The wrong view was blindly followed by myself in my translation.

I doubt if sufficient attention has been paid to the dramatic conditions of the problem to be solved. What had Sophocles in view, in planning this incident, and in writing these passages? He was proposing (1) to add interest to the action of the play by the conduct, behind the scenes, of a flight and capture along roads well known to his audience; and (2) to utilise this

incident so as to bring out in Theseus the characteristic of thorough practical efficiency as a putter down of violence. Interpretations which make Theseus appear incompetent, or which militate against obvious facts of topography, should not be lightly hazarded; neither must we conclude, however we may be unable to explain the allusions, that they were not clear to an Athenian audience, or that Sophocles and his audience did not care that they should be clear.

There were in the time of Sophocles, and still are, two roads from Athens to Thebes: one leading by the Sacred Way, through the Pass of Daphní, between Corydallus and Aigaleos, to Eleusis, and thence over the mountain chain by Dryosephalae between Cithaeron and Megalo Vounó; the other leading past the north eastern end of Aigaleos, along the low neck joining it with the mountain range, and traversing this last by the Pass of Phyle, between Megalo Vounó and Parnes. When we find poetic use made of the circumstance that there was more than one road, we must not forget that to an Athenian mind these roads, first, would necessarily suggest themselves: and any interpretation which involves a different route, and still more if it ignores these, or either of them, will require justification.

In the first passage quoted we have an order given on the spur of the moment by Theseus, to make haste and occupy the places "wherever packmen's roads converge," so the girls do not pass by them. This I interpret, not of some particular fork, but of *all* the spots in the suburbs of Athens, close at hand, where roads converge that are used by packmen *arriving from the country*; the use of the words *μάλιστα* and *ἐμπόρων* I think points to convergences in the direction of Athens, not a single particular convergence in the direction of Thebes: such convergences as the poet had in mind l. 1592, when he says Oedipus

ἔστι κελεύθων ἐν πολυσχίστων μιᾷ.

I fail to find in the text any indication of an actual convergence of two roads, each starting from Athens, in the direction of Thebes, such as has generally been taken for granted. The object of looking for such a convergence has been to fix upon a place where the guards might lie in wait, and catch the fugitives, by whichever of the supposed two roads they were going. Such a spot has been suggested near Eleusis, just where the railway now descends from the Neck, and approaches the Sacred Way, or again, further off, half way from Eleusis to Oenoe. Here the girls are supposed to be recaptured. Theseus's first plan is on this hypothesis successful; it is to give the abductors scope, to 'make haste' and wait for them ten or fifteen miles off, in the security that whatever road they may take, they must turn up at this particular spot.

To this I object: (1) The plan is imbecile; it is not the sort of way to catch anybody anywhere. (2) There is no point that blocks both the roads, that by Oenoe and that by Phyle. (3) A flight towards Thebes starting from Colonos round the N.E. of Aigaleos, and then making for Eleusis, is an impossible one. The railway to Eleusis goes that way for the sake of the

low gradient: but as a horse or carriage road it is as inconceivable as the way by Decelea. (4) From the second passage quoted we find that the precaution taken by Theseus in the first was not successful. This I venture to maintain, on the principle that in Greek literature the last suggested alternative is always that intended to be selected. This upsets the motive of the hypothesis criticised. (5) For the same reason I do not believe it was near Eleusis, or anywhere *ἐν τόποισι τοῖσδ'*, *i.e.* in Attica, that the abductors are supposed to be arrested, but *χώρας φυγόντες τῆσδ'*, *i.e.* as they cross the frontier. This however, upon any route passing by Eleusis, they could not do till they reached the Pass of Dryosephalae, which is unreasonably far (30 miles) from Athens. (6) On the same principle we must consider the second route described in the Chorus, that of the antistrophe 1055, to be the actual scene of the recapture; and this again takes us, whatever we may make of it, quite away from Eleusis, which lies on the alternative route previously described in the strophe.

Before attempting to construe these last lines, let us suppose ourselves for a minute standing with Sophocles on Colonus Hippios. All roads coming from the country, we know, meet at last behind us, at the Altar of the Twelve Gods, by the other Colonus; but here we have, to the left, the Sacred Way, and to the right the line of the railway and modern *ὁδὸς Πατίσιος*, both leading to Thebes. Looking along the first, we cannot indeed see, but we can hardly forget, the temple of Apollo on Poccilum, and the Torch-lit Shore of Eleusis; looking along the second, we see snow on Parnes: and a marked depression to the west of it, which is Phyle:—‘Or haply will they be drawing near to the region westward of the snow-clad Rock, passing out of the common field of the tribe of Oea?...He shall be caught (there)!’ I really do not see how the route by Phyle could be more graphically indicated.

In holding that *χώρον* may be understood l. 1055 from *χώρους* l. 1054, I lay stress upon an antithesis parallel to that noticed above in the second passage commented on, between *τούσδ' ἀρὰ χώρους*, places in Attica, and *τὸν ἐφέσπερον πέτρας νιφάδος [χώρον]*, which is not within Attica, but on the frontier. I also call attention to the point, which I think plausible on the principles of Greek literary construction, that the place where on this theory the girls would be recaptured is the very furthest, between Athens and Thebes, which is in any degree visible from Colonus. Also that snow would lie on the south-west slope of Parnes in March, but not on the south-east slope of Aigaleos. Also that snow, if any, on the further side of Aigaleos is poetically unimportant, being out of sight from Athens.

I now come to the Scholiast, whom nobody has as yet translated, though he has been a good deal discussed.

‘Or haply the westward—he is speaking of Aigaleos; for this mountain is on the outskirts of the deme named: and they are enumerating the places at which they think it most likely that the encounter will take place between the followers of Creon and of Theseus. In *of the snow-clad rock* he may possibly be speaking of the so-called Smooth Rock, or of the crest of Aigaleos; which are reported to be in that neighbourhood. Even as Istros

in the first book of his *Miscellanies* narrates thus: *From the Sea-coast (or from the torrent, Leake) [we went up] to the Smooth Rock. And a little way on: Thence as far as Colonos past the place entitled the Brazen Place, whence to the Cephissus as far as the Sacred Way that leads to Eleusis: and from this point the parts which lie to the left hand of those proceeding to Eleusis, as far as the easternmost summit of Aigaleos.* In one word, he is speaking either of the so-called Smooth Rock, or of Aigaleos: and the meaning is *Will they be approaching the western region of the Smooth Rock?*

Now in all this the point aimed at, the identification of the Smooth Rock with the Snowy Rock of Sophocles, is stated as a mere conjecture, suggested by the first quotation from Istros, and is not made out. • Of the second quotation from Istros nothing can be made, for we are not told what Istros was driving at; if he is describing the limits of the deme of Oea, it is clear from the mention of Colonos, Cephissus, and the Brazen Place, that Oea lay on the hither or south-eastern side of Aigaleos, and not, as Col. Leake would have us place it, on the further side, in the Thriasian Plain. In any case, on the hither side it must be, on the authority of the Scholiast himself: for he says Aigaleos is 'on its outskirts,' which to one regarding it from Athens can have no other meaning. As to the Scholiast's own views of Oea, they are not clear, and he does not seem to speak from knowledge of the spot; they are moreover contradicted by Hesychius, who asserts roundly, 'Oea was not there.' But it is possible we were not intended to place Oea west of Aigaleos, but only the region entered by the fliers as they left Oea. Properly speaking there is no region 'west' of Aigaleos; the Thriasian Plain is rather N.N.W. of it than W. Did any one in his senses ever speak in a passage intended to be graphic, of 'approaching a region west' of a range, when what he meant to describe was 'starting on the South of it, passing round its N.E. end, all along the back of it, till you approach, on leaving it, the region N.W. of it'?

Rejecting his topography, I am entitled to quote the Scholiast against Sir R. C. Jebb as an authority for understanding *χωρον* in l. 1055, for taking *πελώσι* as equivalent to *προσπελάσωσι*, and generally for retaining the MSS. text unaltered. If with Sir R. C. Jebb we abandon the convergence outward of the routes, I cannot see any pretext for the distortion of the second route. Lastly, the very worst of all conjectures is that which distorts the first route behind Aigaleos, in order to obtain a convergence near Phyle. It unites all the impossibilities, and solves none of the difficulties.

II.—THE TRIODOS IN *Oed. Tyr.*

O. T. 715. καὶ τὸν μὲν, ὥσπερ ἡ φάτις, ξένοι ποτὲ
λησταὶ φονέουσ' ἐν τριπλαῖς ἀμαξιτοῖς.

„ 733. Φωκὶς μὲν ἡ γῆ κλήζεται· σχιστὴ δ' ὁδὸς
ἐς ταῦτ' Δελφῶν καπὸ Δαυλίας ἄγει.

O. T. 800

τριπλῆς

ὅτ' ἦ κελεύθου τῆσδ' ὁδοιπορῶν πέλας,
 ἐνταῦθά μοι κῆρύξ τε καπὶ πωλικῆς
 ἀνὴρ ἀπήνης ἐμβεβώς, οἶον σὺ φῆς,
 ξυνηντίαζεν.

The accounts given by travellers of the locality and of the incident appear in some respects unsatisfactory. In the absence of any good map, a capital T followed by a full stop will serve me as a diagram (T.). The stem and right limb of the T represent the course of the Platania, flowing first north, then east. The left limb is the gorge of Zymeno. Parnassus fills all the ground north of the cross line; Mount Kirphis all the angle between the left limb and the stem. In the other angle is a low hill, and east of it a meadow. Roads exist, and must long have existed, along each of the three water-courses; but we cannot be certain that they have always and at all places been on the same side as at present of the streams. At the present day the main road from Delphi to Daulia lies north of the cross line, and a branch road, described in the older books as that from Ambryssus, west of the stem. Thus Wordsworth's *Greece*, p. 231 :

'The road from Daulia to the S.W. leads along a rugged valley to Delphi; and falls in with another from Ambryssus on the South at a point half-way between the two. This place was called the Schisté Hodos or Triodos. . . . The tomb of Laius and his attendant was seen by Pausanias on the spot where they fell, which is now called Zymenó.'

Upon this I observe that Zymeno itself is a well and khan much further to the west than this junction of the roads. But this is not all. To suppose that the three roads led (1) to Delphi (2) to Daulia and (3) to Ambryssus destroys, to my mind, the whole point of the story. Oedipus is hastening from Delphi with the one object of travelling as far as possible from Corinth. He is not therefore going southwards to Ambryssus. Suppose him going to Daulia. Whence, then, is Laius coming? Not, certainly, from Ambryssus: in so far as the commentators have realised the scene, they have supposed him coming from Daulia, and so meeting Oedipus directly, in the way he was going. Now I do not say this is impossible; I do not deny that the word *ξυνηντίαζον*, which no doubt suggested it, may be urged in its favour; but I am convinced it is a mistake. If Oedipus and Laius met each other at a casual fork, while travelling the same road, there is no point in the often repeated assertion that they met at a triodos; the turning to Ambryssus is merely one of half-a-dozen that might be selected; there is nothing in the circumstance specially tragic, nothing Sophoclean, nothing Greek.

It is true that modern travellers from Thebes generally proceed after leaving Livadia round by Chaeronea and Daulia to Delphi. They do so, as Pausanias did, to see the cities on the way; and also to take advantage of a good road as far as Chaeronea. Meantime they hardly notice, in their guide books, the mention of a direct road, leading due west from Livadia

through the lonely valley in which lie ruins ascribed to the Phocian Trachis. Along this road I found everywhere traces of a paved way, which the local guide ascribed to the Turks, but which must at least have been as old as the Frankish occupation, and was probably an ancient route. At the ancient well of Korakolitho, represented in the diagram by the full stop, it descends abruptly into the meadow. Thence at the present day its course, very ill defined, proceeds westwards, south of the low hill, and then turns northwards, joining the Ambryssus road as it crosses the river bed. This would be the road for Laius to follow, going on business straight to Delphi. At whatever point it in ancient days joined the main road, he meets a wayfarer proceeding along that road. It may have been, as generally believed, at the present junction; it may have been further east, on the right bank of the Platania, in the meadow. Oedipus was bound for Daulia, perhaps for Thessaly; in another moment he would have passed on, the danger would have passed with him; but fate forbids: Laius has already reached the fork; the paved way is too narrow for an armed man to pass the driver and the chariot together; the driver jostles him, he strikes back, the old king intervenes and is struck down. There is no suggestion of a narrow gorge or steep descent; the collision was due to the narrowness of the pavement (804):

ἐξ ὁδοῦ μ' ὃ θ' ἡγεμὼν
αὐτός θ' ὁ πρέσβυς πρὸς βίαν ἡλαυνέτην.

That the present junction is the place where a modern conflict took place between Greek soldiers and brigands is nothing to the purpose. No trace has yet been found there of the monument Pausanias saw. I think search might be made for it with advantage, among the many large stones in the meadow further east.

It may be objected, however, that Oedipus did not go to Thessaly; that he came to Thebes: and that if he went thither round by Daulia, Laius may have gone to Delphi that way. It may be so; but Oedipus was wandering, Laius travelling on business. The circumstances of the coming of Oedipus to Thebes are not known to us, except that he there encountered the Sphinx. If this implies that he came over Mount Sphingion, he may well have come from the north, by Akraephnia. In any case I submit that the way in which the locality is indicated by Jocasta, in the second passage quoted, as she stands with Oedipus on the Kadmeion, looking out over the region, is decisive in favour of Thebes as the direction of the branch road. She says, 'A forked road leads to the same place from Delphi and from Daulia;' there is no mention of Ambryssus, or of any other destination for the road after the junction. Its destination, therefore, is Thebes, the place where the speaker stands; this appears the sufficient and only possible reason why she does not specify it. With this I am glad to see Mr. J. G. Frazer (Pausanias, vol. v. p. 231) concurs. But why does he add (p. 232) 'When Oedipus and Laius met, Oedipus was on his way *from*

Delphi to Thebes, and Laius was on his way from Thebes to Delphi' ? This makes the road to Daulia as superfluous, dramatically, as is that from Ambryssus on the older hypothesis. That Oedipus went straight to Thebes, after slaying Laius, seems to me even more improbable than that Laius went round by Daulia to Delphi.

GEORGE YOUNG.

ROADS IN PONTUS, ROYAL AND ROMAN.¹

[PLATE IV.]

I.

THE territory once occupied by the Mithridatic kingdom of Pontus lies between the Euxine and the northern edge of the high Anatolian plateau. It consists of a long strip of seaboard and a broader central tract of alternate river valleys and mountain ranges. The mountains and valleys run more or less parallel to the coast, and rise one behind another up the slope, like lines of gigantic entrenchments scored along a hillside. The channels whereby the Iris and the Halys pierce their way northwards are mere rifts cleft across through the ridges. The main trend of hill and dale is from east to west.

The northernmost chain of mountains steeply overhangs the Euxine and cuts off the seaboard from the country behind. Roads across this barrier are few and difficult. In the whole stretch of coast, from Amastris on the west to Trapezus on the east, Amisus is the only open door into the interior. Here, between the Paphlagonian mountains and the Paryadres range, the Halys and the Iris find an exit to the sea, and there is a slight dip—it cannot be called a gap—over which a great road penetrates to Amasia and Cappadocia. The road is not really difficult, but it is toilsome, for although this central section of the country is relatively low, yet the ridges and valleys pursue their course without interruption across the hollow, and if the former are not quite so high as in the east and west the latter are deeper. The modern *chaussée* beyond Amasia reaches Sivas (Sebasteia) by way of Tokat (Dazimon). Probably this route was sometimes used in antiquity, e.g. by Mithridates when he fled from Cabira before Lucullus. But the main road in Mithridatic times seems to have taken the more hilly but more direct course through Zela to Mazaca (Caesarea). It was in this neighbourhood that the roads from the upper Halys on the east and Tavium on the west met the roads from Mazaca and

¹ I ought to say that my own knowledge of Pontus is drawn from journeys in 1891 and 1899 along the following routes—(a) Sivas, Zala, Enderes, Park (Nicopolis), Lycus valley, Niksar, Tokat, Amasia, Samsun (cf. *Supplementary Papers of the Royal Geographical Society*, vol. iii); (b) Samsun, Helek, Niksar,

Tokat, Turkhal, back to Niksar, Sonisa, Ladik, Khavsa, Vezir Keupru, Halys bridge, back to Khavsa, Mersovan, Chorum. The books which I have found most useful after Strabo are for geography Murray's excellent *Guide to Asia Minor*, and for history M. Théodore Reinach's admirable study *Mithridate Eupator*.

Amisus. In later days Sebastopolis (Sulu Serai) usurped the place of Zela, but the early importance of Zela is shown by the two battles fought there. Sebastopolis was doubtless the better road-centre, but Zela, a great religious sanctuary and the southern frontier city of Pontus, at first overshadowed it and long maintained the preëminence in spite of some disadvantage of situation.

This road from Amisus to Zela was of great commercial importance. It was the only great road in Pontus from north to south, and connected Amasia, the inland capital of the country, with the sea. More than that, it was the one northern outlet for the whole of eastern Asia Minor, and so corresponded in some degree to the famous road southwards through the Cilician gates. Amisus, its northern terminus, lay on the headland to the west of the modern town,¹ where the ground is still littered with its ruins. The starting-point of the main road southwards, the link between seaboard and interior, planted between the alluvial plains at the mouths of the Iris and the Halys—the only large shelves of level land on the whole coastline—Amisus seemed destined by nature to become the maritime capital of the kingdom. The choice of Sinope for that honour can only be explained by its incomparable situation for a naval arsenal and the wide ambitions of the later kings. Sinope was promoted for strategic and imperial reasons to be the Queen of the Euxine. Amisus remained and remains the commercial capital of Pontus.

But important as this road from Amisus to Zela certainly was, it was not the main artery of communication within the kingdom. It was useful for external trade or intercourse with the outside world, but it ran counter to the configuration of the country. The natural routes of Pontus run at right angles to it, and it was along these that the kingdom extended its territory. The long axis of the country lay east and west.² We have now to consider the roads in this direction.

The nucleus of the whole land is the valley of the Iris, or rather the two valleys and the open shelf of coast watered by that river. Its three plains, Themiscyra, Phanaroëa, and Dazimonitis,³ rise like terraces one above another from the sea to the base of the plateau. Each upper terrace is fenced from each lower by a parapet of mountain, so that easy communication between the plains is to be found only at their extremities, and every road from east to west is bound to run straight through one or other of them. The plain of Themiscyra is the eastern half of the flat threshold of Pontus which the Iris and Halys are gradually building. But the northern range presses so closely on the Euxine that there is no continuous easy passage along the shore. A road of a sort has no doubt existed from time immemorial,⁴ but it has never

¹ Samsun. One would naturally interpret the name as εἰς Ἀμισον (cf. Stambul, Isnik, Ismir, etc.), but certain of the coins seem to attest a genuine ancient form with initial sibilant.

² Mr. J. G. C. Anderson tells me that Amasia is 71½ miles by road from Samsun, and estimates the total to Zela at 99½. No Pontic road from

north to south could be much more, whereas the road from Niksar to the Halys, only a fraction of the total length of the kingdom, is 105 miles.

³ Turkish Charshembey Ova, Tash Ova, and Kaz Ova.

⁴ Cf. Xenophon, *Anab.* v.

been a good one, and all traffic is carried on upon the broad highway of the sea. A coast road is not wanted, and would be of no service to the inland country cut off from it by mountains and forests. Dazimonitis, the uppermost terrace, is traversed by an important road but a short one. The Iris enters the plain at Comana from a mere *cul de sac* in the hills. The only practicable eastern entrance is the easy pass up from Niksar (Cabira, Neo-Caesarea). At the western extremity of the plain the road forks north-west to Amasia and south-west to Zela. The central terrace, Phanaroea, is the heart of the whole kingdom. It is a magnificent plain some forty miles long and three to five broad, divided into an upper and a lower basin by some low hills between Herek and Niksar. The Iris issues swirling and turbid from a rocky gorge at the west end, joins the Lycus about the middle of the lower basin, and disappears, as if down a sink, by a hidden channel close under the huge shoulder of the Paryadres range, which stands like a wall along the north-eastern edge of the plain. The lower slopes all round are dotted with villages embedded in gardens and groves of fruit-trees which show as dark green patches on the cornland. Water is good and plentiful. For an inland district the elevation is singularly small, only seven or eight hundred feet above sea-level. In Strabo's time the olive flourished there, although it is rare even on the coast; and at the present day rice is grown on the flat ground below Niksar. This Garden of Pontus lay right in the centre of the kingdom. Eastwards from it the long straight valley of the Lycus runs up into Armenia Minor almost to the Euphrates. Westwards the valley of the Sepetli Su gives a gentle easy ascent to Lake Stiphane (Ladik Göl), whence there is a good road over open undulating country to the Halys; and from the opposite bank of the Halys the valley of the Amnias offers a passage through the highlands of Paphlagonia to the frontier of Bithynia. Thus from the head waters of the Lycus to those of the Amnias, throughout the entire length of the land, nature has marked out an easy line of communication. This was the grand trunk road of the kingdom of Pontus.

One might almost say that Pontus consists of two roads, this great trunk road and the commercial highway from Amisus to Zela. Along them moves the main history of the country, and most other roads may be regarded as mere loops to them. The most important loops are, *to the north of the trunk road*, the road from Cabira (Niksar) over the Paryadres to Oenoe, along the coast through Amisus (where it hooks on to the commercial highway) to Sinope, and back over the hills to the Amnias near Boiavad; *to the south*, the road from Amasia through the plain of Dazimon to Cabira, and the road from Zela by the upper Halys¹ to Nicopolis. Three 'short-circuit routes' must be particularly mentioned: first, the way down the Iris from the Phanaroea to

¹ The valley of the upper Halys, originally Cappadocian, was subject to Mithridates Eupator. It was linked to Pontus through Zela at the one end and through Nicopolis at the other. The road Zela, Yerisa, Sebasteia, Camisa, Zara, Nicopolis, marks the line of this

province. Dr. Carrington of the American College at Marsovan tells me the curious fact that on this line and southwards from it all the Armenians speak Turkish, whereas north of it all speak Armenian.

Themiscyra, a road which is now little used and frequented only by smugglers but seems to have had some importance in antiquity¹; second, the pass from Herek to Comana, not an easy road but practicable for waggons; third, the road from Tokat to Sivas.

The two main roads cut one another between Ladik and Khavsa, and it is here that we should expect to find the inland capital of Pontus. But just as the maritime capital was diverted from Amisus to the strategically superior site of Sinope, so the inland capital was attracted southwards from the junction of the roads by the matchless position of Amasia with its impregnable citadel, its wonderful vineyards and gardens, and its immense cornfield in the Sulu Ova, Strabo's *Χελιόκωμον πεδίου*. The importance of Amasia called for a direct communication with the Phanaroea, and created, or at least developed, the road from its western extremity up the Iris valley.² This independent road was continued beyond Amasia through the Sulu Ova to meet the roads from Angora through Chorum and from Paphlagonia through Osmanjik. Another important independent road branched from the trunk road at Nicopolis and struck across to the bend of the Euphrates at Zimara.³ But neither of these roads could rank with the two already described in importance for the vital economy of the country. To use a physiological metaphor, the road from Amisus to Zela was the alimentary canal of the national body, the road from the head of the Lycus to that of the Amnias was its spinal cord. The one was necessary to the trade and material power of the Pontic kingdom, the other to its unity, administration, active force, and defence. It is with the latter that History is chiefly concerned.

II.

The system of roads and the campaigns of Mithridates Eupator and his son Pharnaces illustrate one another. It will be useful briefly to review those campaigns, so far as they fall within our province, in relation to the topography.

The annexation of Armenia Minor⁴ was probably one of the earliest of Mithridates' enterprises. Control over the upper valley of the Lycus, and the head of the great road down it, was essential both to the security of his hereditary kingdom and to the pursuit of his designs on Colchis. The old frontier of Pontus probably ran from the head of the Iris valley northwards through Koilu Hissar, where two strong fortresses guarded the pass down

¹ This road was included in Pontus Galaticus (Ptolemy, *Geogr.* v. 6, 3), probably in order that the Galatian province might have its own free access to the sea. By it Lucullus entered the Phanaroea. One purpose of the fortress of Eupatoria-Magnopolis was to guard it.

² There are Roman milestones in the Phanaroea belonging to the Neo-Caesarea-Amasia

road at Niksar, Fidi, and Chalgara. Fidi = Ptolemy's *Πίδα*, which appears also on the Peutinger Table.

³ See Mr. V. W. Yorke's discussion of this road in the *Geographical Journal*, vol. viii. pp. 467-8.

⁴ Strabo, 555.

the Lycus, to Pharnacia on the coast. The acquisition of Armenia Minor carried the kingdom to its natural eastward limit.

We next turn to the western end of the trunk road. In the year 88 B.C. Nicomedes of Bithynia invaded the Pontic territory by the valley of the Amnias. Mithridates was mustering his forces in the Chiliokomon, but his vanguard under Archelaus and Neoptolemus met and routed the Bithynians on the Amnias. Mithridates pressed forward up the river, forced the pass over Mount Scorobas at the head of the valley, which was only feebly defended, and poured his army into Bithynia. These operations were all on the trunk road west of the Halys. Probably the battle was fought near the junction of the road to Sinope, in defence of that capital.¹

The raids of Murena in 83 B.C.² only touched the southern frontier districts of Pontus. I believe (with Mommsen, against Reinach) that the Comana reached by him was not the Pontic city but the Cappadocian. Memnon ascribes to him a movement on Sinope, but I suspect that he has confused him with his son, the lieutenant of Lucullus, Cicero's client.

In 74 or 73 B.C. Mithridates again invaded Bithynia. His route is not clear, but seems to have been the road through Osmanjik and Tossia rather than the valley of the Amnias.³ Probably his forces gathered in the Chiliokomon and he took the shortest way in order to save time.

On his return from this disastrous campaign Mithridates took up his position at Cabira (Niksar) at the east end of the Phanaroëa, and organised a fresh army. Lucullus, much hampered by lack of transport and provisions, advanced slowly through Galatia, and probably entered Pontus by way of Chorum and the Chiliokomon. His first care was to establish communications with his fleet. He left Amasia and the Phanaroëa, which were occupied by Mithridates' troops, unmolested on his right, and marched straight down the great north road to Amisus, to which he laid siege. The defence was stubborn, and Mithridates contrived to aid the besieged with supplies and reinforcements, probably sent down the road along the Iris and through the town of Themiscyra. It was doubtless partly to check this assistance, partly to open the way for his attack on Cabira, that Lucullus, leaving his legate Murena to blockade Amisus, marched with three legions against Themiscyra and Eupatoria, which guarded the lower and upper ends of the pass. The fortress of Eupatoria was doubly important. It stood just at the mouth of the gorge on a rocky knoll by the right bank of the Iris a little below its junction with the Lycus, and commanded not only the pass down the river but also the bridge which carried the great trunk road across it. The capture, by storm or by treachery, of these two strongholds admitted

¹ Appian, *Mithr.* 18-9, Memnon 31, Strabo, 562.

² Appian, *Mithr.* 64-6, Memnon 36.

³ Appian and Plutarch are vague. Memnon (37) says *ἠπείγετο διὰ τῆς Τιμωνιτίδος Παφλαγορίας εἰς τὴν Γαλατίαν, καὶ ἐναταῖος εἰς τὴν Βιθυνίαν ἀφικνεῖται*. But according to Strabo

(562) Timonitis bordered immediately on Bithynia. Possibly, as Reinach suggests, Mithridates' army marched in two columns. One would go by Osmanjik and Tossia, the other by Chorum and Changra. On the date see Reinach, *Mithridate*, p. 321, note.

Lucullus to the Phanaroëa.¹ He turned eastwards along the trunk road to attack Mithridates.

From Eupatoria to Cabira the road runs through level ground between the right bank of the Lycus and the foot of the Paryadres range. But about 15 miles from Eupatoria and 12 from Cabira it has to cross the broken ridge of hilly country which divides the Phanaroëa into two basins. The Lycus has cut a channel through the ridge, but neither the Eupatoria road on the right bank, nor the Amasia road on the left, can follow the river at all closely. The latter road crosses the Lycus a little above the gorge on a bridge, which has been many times rebuilt, but seems to be Roman in parts, and probably represents a still older original. Mithridates advanced over the bridge along the Amasia road, and threatened the flank of Lucullus' column on its march from Eupatoria. In response to this challenge the Roman cavalry seems to have crossed the river, which is easily forded in summer, and an engagement ensued, in which the Pontic horsemen were victorious and gained control of the whole plain on both sides of the Lycus right up to the Paryadres. Lucullus was driven up the slope leaving the road in possession of the enemy, who cut him off from Eupatoria. But if Mithridates was eager to cut off Lucullus, Lucullus was no less eager to cut off Mithridates. By a night march along the hillside he circumvented the king, and entrenched himself in a strong position above the plain, out of reach of the cavalry and defended by a ravine. This position must, I think, be sought on the ridge between the two basins,² perhaps near the village of Manas, where there is a deep watercourse spanned by a fine single-arched bridge resting on possibly ancient foundations. In this situation Lucullus blocked the direct road to Cabira and threatened the bridge on the Amasia

¹ The accounts transmitted to us of these operations (Appian, *Mithr.* 78-9, Plutarch, *Luc.* 14, Memnon 43-5) are meagre and obscure. The route followed by Lucullus is defined only as having lain 'through the mountains,' and no relation is recognised between it and his attacks on Themiscyra and Eupatoria. We are left in the dark as to the fate of Themiscyra, which must have been taken before Lucullus could proceed. The capture of Eupatoria is falsely involved with the siege of Amisus. If there really was a second Eupatoria, a suburb of Amisus (which I doubt), it might explain this misapprehension and the contradiction between Memnon, who tells how Eupatoria was carried by an unexpected assault, and Appian, who implies that it surrendered to the Romans (*Mithr.* 115). But I am inclined to believe that the root of the confusion may have been that the story of the siege of Amisus was reserved to the date of the capture of the city, and with it the attack on Eupatoria (cf. Memnon's order), so that the latter was divorced from the march of Lucullus and

falsely connected with Amisus, to the dislocation of the whole plan of campaign. Memnon's account of the storming of Eupatoria looks like a reduplication of the capture of Amisus, whereas M. Reinach's ingenious combination of the surrender of the fortress with the treason of Phoenix is extremely plausible (Reinach, *Mithridate*, p. 337).

² It is true that Plutarch (*Luc.* 15) speaks of Lucullus having got through a 'pass' and occupied a position 'overhanging Cabira,' but these expressions seem to me to be not unnatural exaggerations. The passage between the river and the hills, or even the whole valley at this point, may reasonably be called a pass. Lucullus had got over the crest of the ridge and overlooked the plain of Niksar. It must be remembered that he cannot be thrust too far eastwards, for he has to communicate with Cappadocia, and the road from Cabira to Comana must have been in Mithridates' hands (Appian, *Mithr.* 82). The ridge was the nearest and most obvious point for Lucullus to seize, and in every way fits the rest of the narrative.

road. Mithridates fell back to protect his communications. He encamped on the left bank of the Lycus opposite to Lucullus, but probably rather farther east and nearer to the bridge. From this station he dominated both plains with his cavalry and held his antagonist pinned against the wall of the Paryadres. The Romans soon began to suffer from famine. To draw supplies from the west along the length of the Phanaroea was impossible. Lucullus was reduced to the desperate expedient of revictualling his army from Cappadocia, across the line of road commanded by the enemy. He probably used the pass from Herek to Comana. The first convoy, escorted by no less than ten cohorts, fought its way through. Mithridates sent his cavalry to waylay the second, but his officers made the mistake of attacking in the pass instead of in the open, and their force was almost annihilated. Having lost the best part of his cavalry Mithridates was in danger of being cut off from Cabira, for the plain was now open to the Roman infantry, and Lucullus held the shorter road. Retreat was necessary, but it became a rout. The king escaped with difficulty to Comana and thence across the Euphrates to Tigranes. He probably intended to gain Cabira by the bridge higher up the Lycus on the Comana road, but was headed off by the Romans.

This interesting strategic duel was fought out entirely on the central section of the great trunk road and its branches. Our authorities,¹ full of detail in describing incidents, are miserably vague as to localities. I have given the interpretation of them suggested to me by the topography.

It was near the same point that Mithridates resumed the contest on his return to Pontus three years later. He entered his old kingdom perhaps by the valley of the Lycus, and blockaded the legate Fabius Hadrianus in Cabira. Triarius opportunely arrived from Asia and raised the siege. Mithridates withdrew up the pass to Comana, and held the line of the upper Iris. Both took up winter quarters, Mithridates at Zela, Triarius confronting him at Gazioura (Gaz-Ibora,² now Turkhal). Triarius had only to cover Amasia and wait for Lucullus, who was falling back through Cappadocia followed by Tigranes. The main object of Mithridates was to prevent their junction and deal with each separately. By a demonstration against Dadasa³ he provoked the legate to attack him, and inflicted on him a crushing defeat. Then he turned to face Lucullus. But so strong was the position which he occupied on the heights above Talaura that the Roman general declined to attempt to dislodge him, and Mithridates did not repeat the error of Triarius by taking the offensive.

The general strategic situation is clear. Mithridates was threatening, and Triarius defending, the road from Zela to Amasia and Anisus. Lucullus was coming up from Nisibis, doubtless by the road from Melitene to Sebasteia (Sivas). Where then is Talaura? It issues coins of Mithridatic date with

¹ The only detailed accounts are Appian, *Mithr.* 79-82, and Plutarch, *Luc.* 15-7. Both evidently draw on the same source.

² Strabo 547 clearly indicates the position of Gazioura. Ramsay, *Hist. Geogr.* 326-8, proves

from Basil that Ibora must also be placed about Turkhal. No doubt Ibora and Ioura are the same word, and Gaz is preserved in the Turkish Kaz Ova.

³ Can Dadasa be Dazya near Turkhal?

the legend ΤΑΥΛΑΡΩΝ, and is mentioned three times in literature, always in connection with Mithridates—(1) Appian, *Mithr.* 115, as a treasure-house, without indication of position. (2) Plutarch, *Luc.* 19. Lucullus pursues Mithridates as far as Talaura on his flight from Cabira to Tigranes. The king had first escaped to Comana (Appian, *Mithr.* 82), so Talaura must lie on a road from Comana to the Euphrates. (3) Dio Cassius, xxxvi., 16, the passage here in question. The two latter passages point in the direction of Sivas. The earliest name of Sivas is unknown. From Strabo we gather that it was Pompey's Megalopolis before it was Sebasteia, but it evidently existed before Pompey's colony.¹ Talaura, which disappears with Mithridates, would fit the position well enough. Mithridates would naturally await Lucullus on the hills north of Sivas near the parting of the roads to Zela and Comana, perhaps at Yeni Khan, where Ramsay (*Hist. Geogr.* pp. 220 and 266), puts the great Byzantine camp of Bathys Rhyax.²

In the spring of 66 B.C. Pompey advanced from Galatia to reconquer Pontus, and Mithridates fell back before him towards Armenia. The narratives preserved to us of this campaign³ are too vague to identify the localities with any precision. Probably the preliminary skirmishes and manoeuvres took place in the hilly country traversed by the Lycus between Nicopolis and Cabira. Mithridates' last stand must be put somewhere near Nicopolis, and the crowning catastrophe two nights' march farther east. Dasteira ought, on the analogy of Dasmenda and Dastarkon, to be a fortress on a rock. Either Koilu Hissar or Shabhan Kara Hissar might be suggested. At all events the whole campaign moved along the great trunk road up the Lycus.

It was in this same region near Nicopolis that Pharnaces defeated Domitius Calvinus in the autumn of 48 or spring of 47 B.C. Domitius advanced from Comana (Pontica) by hill tracks along the ridge between the Iris and the Halys (or at least along one of the ridges between the Lycus and the Halys). He attacked Pharnaces under the walls of Nicopolis, and withdrew after his defeat to Cappadocia and Asia, doubtless through Zara and Sebasteia.⁴

Pharnaces overran Pontus, and on the approach of Caesar a few months later from Comana in Cappadocia, took up his station at Zela to cover his new dominions. Caesar venit, vidit, vicit. The battle was fought on the same ground on which Mithridates had vanquished Triarius. Pharnaces fled to Sinope, whence he took ship for his Bosporan kingdom. Probably he escaped down the main road to Amisus, which was in his possession.⁵

¹ Strabo 563, cf. 557 and 559.

² On the whole campaign see Dio Cassius, xxxvi. 11-17, Plutarch, *Luc.* 35, Appian, *Mithr.* 88-90. Appian sends Mithridates back from Zela into Armenia Minor, but that is improbable, for Lucullus would hardly have crossed the Halys before Sivas, and was not many days journey from Zela when the battle

was fought.

³ Dio Cassius, xxxvi. 46-50, Appian, *Mithr.* 97-101, Plutarch, *Pomp.* 32, Strabo, 555.

⁴ *Bell. Alex.* 34-40, Dio Cassius, xlii, 45-6.

⁵ *Bell. Alex.* 66-77; Dio Cassius, xlii, 46-8, Appian, *Mithr.* 120, *Bell. Cic.* ii. 91, Plutarch, *Caes.* 50, Suetonius, *Jul.* 35, 37.

III.

The foregoing review of campaigns has sufficiently indicated the military importance of the main roads and especially of the trunk road through the heart of the country. This great road was guarded in Mithridatic times not only by a chain of castles—Strabo names Sagyllum, Ikizari, New Castle,¹ Dasteira, Hydara, Basgoedariza, and Sinoria—but also by the first-class fortress of Cabira, the capital of eastern Pontus, and by two military colonies, Eupatoria and Laodicea. Eupatoria has already been described. It guarded the pass up the gorge of the Iris and the bridge over that river. Laodicea is not noticed by our literary authorities, but is known from coins, and still keeps its name in the Turkish Ladik. It lies near the western end of Lake Stiphane against the hills which fringe the south shore, just below a strong castle which is possibly Strabo's Ikizari. The foundation of Laodicea is very plausibly ascribed by M. Reinach (*Mithridate*, p. 54) to Laodice the mother of Mithridates Eupator. Its position, close to the crossing of the two main roads, seems to show that this colony was intended to garrison that important point, or even to become a new capital for the entire kingdom.

When Pompey organised the conquered territory after the final expulsion of Mithridates, he planted no less than five of his cities on the trunk road. These were *Nicopolis* (Purk, near Enderes in the valley of the Lycus), which probably superseded Dasteira; *Diospolis*, the Mithridatic Cabira, afterwards Sebaste and later still Neo-Caesarea (Niksar); *Magnopolis*, Mithridates' Eupatoria; *Neapolis*, formerly Phazemon, between the Phanaroëa and the Halys; and *Pompeïopolis*, now Tash Keupru, on the Amnias.

Only Neapolis is difficult to fix. Its territory is clearly defined by Strabo,² but contains three possible sites, Vezir Keupru, Ladik, and Khavsa. Vezir Keupru has hitherto had the best claim, but an inscription copied there by Mr. J. G. C. Anderson and me proves that it was Neo-Claudiopolis, and Neo-Claudiopolis can scarcely be a later name for Neapolis, because its native name was not Phazemon but Andrappa.³ Ladik cannot plausibly be identified with Neapolis, for its coins show that the name Laodicea dates from Mithridatic times, so that it would have to come between the names Phazemon and Neapolis. But in that case Strabo must surely have mentioned it, and why should the ephemeral name Laodicea have taken root and survived rather than the Roman Neapolis or the native Phazemon? There

¹ The precise position of *Καινὸν* has not been determined in spite of Strabo's detailed description (556), but it probably stood near the Lycus.

² Strabo 560. The text seems to be corrupt although the sense is plain. Besides the correction *Νεαπολίτιν* for *Μεγαλόπολιν*, I fancy we ought to write *παρὰ* for *κατὰ* (cf. Meineke, *Vind. Strab.*), put a comma at *κώμην*, and read *ἀποδείξας [αὐ]τὴν κατοικίαν*. *Κατοικία* is almost a

technical term for a military colony.

³ Neo-Claudiopolis is known from coins. Ptolemy, V 4, 6, identifies it with Andrappa, *Ἀνδράπα ἢ καὶ Νεοκλαυδιόπολις*. Andrappa was certainly the later name of the place, and the only name in Byzantine times. There is no positive proof that it was the earlier, but all probability favours the assumption. Our inscription has been published by Mr. Anderson in the *Journ. of Hell. Stud.* xx., p. 152.

remains Khavsa, where inscriptions attest an ancient site. The frequented hot baths of Khavsa are obviously the *θερμὰ ὕδατα τῶν Φαζημωνιτῶν* noticed by Strabo. The expression seems at first sight to separate them from the town, but Phazemon, and therefore Neapolis, now appears to have been actually at the springs.

These Pompeian foundations were intended to garrison the road and stretch a chain of Roman influence and civilisation through the whole length of the land. How many of them were included in the original province of Pontus is a difficult question¹; but their purpose is clear, and we are here concerned, not with the intricate and ephemeral arrangements made by successive Roman rulers for the government of the old Mithridatic realm, but with the relation of the great Pontic highway to the eastern frontier.

In the early years of the Empire a fringe of client states separated the Roman provinces from the Euphrates. It was doubtless partly because many of the border lands remained outside its immediate control, partly also because the eastern boundary was not acknowledged to be more than temporary and provisional, that the imperial government did little or nothing to organise the defence of the Upper Euphrates frontier before the close of its first century. The settlement effected by Corbulo with Parthia and the successive annexations of the kingdoms of Pontus Polemoniacus, Armenia Minor, and Commagene must have pressed the problem forward. Vespasian, who completed the annexation and first installed legions in Cappadocia,² may plausibly be assumed to have organised the scheme of defence, which appears in any case to have been laid out before Trajan's progress up the Euphrates.³

¹ Strabo's words (561), *ἐκείνος (Πομπήιος) μὲν οὖν οὕτω διέταξε τὴν Φαζημωνίτιν, οἱ δ' ὕστερον βασιλεῦσι καὶ ταύτην ἐνείμαν*, imply that Neapolis was included. His account of Pompey's distribution of Paphlagonia (541), some of which was given to the House of Pylaemenes and some retained, implies that Pompeiopolis was included. Both these cities were again included in the province of Pontus before Strabo wrote (544—*καὶ μέχρι δεῦρο τοῖς Ῥωμαίοις ἡ Ποντική ἐπαρχία ἀφώρισται*, cf. 561-2, where *ἡ ἐκτὸς Ἄλυσος χώρα τῆς Ποντικῆς ἐπαρχίας* includes Pompeiopolis) and their era, 6-5 B.C., indicates the date of their re-admission. Cf. *J.H.S.* xx. pp. 152-3, 155, 160-1. The four great coast-towns, Heraclea, Amastris, Sinope, and Amisus, were certainly included (M. Th. Reinach exaggerates when he says, p. 400 note 7, that Heraclea was not restored before the time of Caesar. See Memnon 60). The other five of Pompey's eleven *πολιτεῖαι* may be open to doubt. The simplest hypothesis is that they were Pompey's other five foundations, Magnopolis, Diospolis, Nicopolis, Megalopolis, and Zela. If Nicopolis *must* be surrendered to Deiotarus, Amasia might take its place, or, as a last resort

if Amasia cannot be admitted, Tieuun. Until the problem of the Pontic *κοινὰ* is cleared up, they had better be kept out of the question. Strabo could not speak as he does on p. 541, if Pompey's province had been no bigger than the later Pontus; and to whom were all the districts afterwards known as Pontus Galaticus and Pontus Polemoniacus assigned? It must be remembered that Pompey's arrangements were upset fifteen years later when Pharnaces overran the country, and that Caesar, Antony, and Augustus made their own distributions.

² Sueton. *Vesp.* 8; cf. Tac. *Hist.* ii. 81, Joseph. *B.J.* vii, 1, 3.

³ Josephus (*l.c.*) says that *Legio XII, Fulminata* was stationed at Melitene at the end of the Jewish War. Commagene, annexed A.D. 72, not without fighting, cannot have been left without a garrison. The camp at Samosata must date from the occupation, and possibly *Legio XVI, Flavia Firma* was posted there from the first. But Commagene was reckoned to the Syrian command, whereas Suetonius and Tacitus speak of *legions* (plural) 'added to *Cappadocia*.' We should expect, therefore, to find that Vespasian also established the legion-

The line of defence consisted of three legionary camps, at Samosata, Melitene, and Satala respectively, connected one with another and with the naval arsenal at Trapezus by a chain of smaller stations on a military road.¹ Each of the three camps was placed at a point where this line running north and south was intersected by a great highway running east and west. Thus it was easy for the Romans to push forward troops and munitions of war from the west, either for the defence of the frontier or for an invasion of the countries beyond the Euphrates.

It is not surprising to find that special attention was paid to the repair of the main roads leading from the west to the legionary camps. What we know of their course and history comes largely from the milestones erected beside them. For the road behind Samosata epigraphical evidence seems to be still lacking. One would expect it to turn up in the direction of Antioch. The road to Melitene has been fully discussed in the light of its numerous milestones by Mr. D. G. Hogarth in the third volume of the Royal Geographical Society's *Supplementary Papers*. The road to Satala was none other than the old trunk road of Pontus. A series of milestones from it will be found published in the *Journal of Hellenic Studies*, vol. xx., and a few more may be added from other sources. The following list is, I believe, complete :—

any camp at Satala. A milestone at Melik Sherif (*C.I.L.* iii. 306, probably on the road from Satala to Melitene), and an inscription near Tiflis (published with *C.I.L.* iii. 6052), both dated A.D. 75, show that his attention was, in fact, directed to the defences and lines of communication in the north-east, where the Alani were a pressing menace (cf. Joseph. *B.J.* vii. 7, 4). On the other hand, we have no evidence of any legion having ever been stationed at Satala except Legio XV. Apollinaris, which can not be proved to have been established in Cappadocia until the last years of Hadrian's reign (Ariau, *Actes c. Alans*, 5). Indeed, the evidence seems at first sight to tell strongly against an earlier arrival. Legio XV. Apollinaris was on the Save in southern Pannonia at the death of Augustus, and took part in the Parthian and Jewish wars (Tac. *Ann.* i. 23, xv. 25. *Hist.* v. 1. Josephus, *B.J.* iii. 4, 2). After the latter it was sent back to Pannonia (Joseph. *B.J.* vii. 5, 3). Now the camp at Carnuntum would seem to have been built by Vespasian in A.D. 73 (*C.I.L.* iii. 11194-6), and the monuments of Legio XV. Apollinaris are so numerous there that they postulate a long sojourn (cf. Mommsen's note, *C.I.L.* iii. p. 550). Hirschfeld, however, has ingeniously argued from the nomenclature of the inscriptions that the camp at Carnuntum must date from before the reign of Claudius, probably from that of Tiberius, and

that Vespasian merely restored or rebuilt it (*Arch.-Ep. Mitt. aus Oesterr.* v. pp. 216-9). If Hirschfeld's argument may be accepted, there can be no difficulty in supposing that Legio XV. Apollinaris, having built the new camp at Carnuntum, was sent on to build new fortifications at Satala and Harmoziea. The antecedent probability that Vespasian planted a legion at Satala strengthens Hirschfeld's argument. I am not aware that the problem has ever been approached from the Cappadocian side.

In any case it can be no accident that the three camps are all mentioned in connection with Trajan. He struck the Euphrates at Samosata, marched up to Satala, and thence into Armenia, and is said to have conferred political status on Melitene (Dio Cass. lxxviii. 18-19, cf. lxxi. 2, Procop. *De Aed.* iii. 4). Nothing can be built on Dio's remark that Trajan occupied Samosata without fighting. He says the same of the whole march to Satala.

If Tacitus' words (*Hist.* ii. 6) *Cappadocia Pontusque et quidquid castrorum Armeniis protenditur* may be pressed, there were camps along the frontier before there were legions. That is probable enough.

¹ The best detailed account of the Upper Euphrates frontier is Mr. V. W. Yorko's paper, 'A journey in the valley of the Upper Euphrates,' in the *Geographical Journal*, vol. viii. 1896. Cf. also *J.H.S.* xviii. 1898.

	Place.	Num- beral.	Emperor.	Legate or Praescs.	A.D.	Reference.
1 ¹	Sadlagh (Satala)	—	—	—	—	<i>J.H.S.</i> xviii., p. 324. Cf. <i>Geogr. Journ.</i> viii., p. 461.
2 ¹	One hour from Sadlagh on the road to Kelkid Chi- flik	—	—	—	—	<i>Geogr. Journ.</i> viii. p. 462.
3 ¹						
4	Zilkhor	23	Nerva-Trajan	T. Pomponius Bas- sus	95-101	<i>J.H.S.</i> xx. p. 159.
5	Achmet Serai	23	Diocletian, etc.	—	292-305	<i>C.I.L.</i> iii. 6895. Cf. <i>Journ. of Phil.</i> 1882, p. 156.
6	Yenije	23	Constantine	Cl. Longinus	—	<i>J.H.S.</i> xx. p. 159
7	Khavsa	16	Nerva	—	97	<i>R.G.S. Suppl. Pa- pers</i> , vol. iii. p. 736.
8	Khavsa	—	Nerva	—	—	<i>Ibid.</i> p. 737.
9	Khavsa	16	Hadrian	—	122	<i>Ibid.</i> p. 737.
10	Ortaklar	—	Decius	M. Jun. Val. Nepo- tianus	250	<i>J.H.S.</i> xx. p. 161.
11	Above Istavras	—	Pius	—	133-61	<i>Ibid.</i> p. 162.
12	Above Istavras	7	Alexander	L. Apronius Pius	222	<i>Ibid.</i> p. 162.
13	Vezir Keupru	7	Hadrian	—	122	<i>Ibid.</i> p. 163.
14	Vezir Keupru	—	Diocletian, etc.	—	292-305	<i>Ibid.</i> p. 163.
15	Vezir Keupru	—	Alexander	L. Apronius Pius	222	<i>Ibid.</i> p. 163.
16	Vezir Keupru	—	Constantine and Licinius	Val. C . . .	317-23	<i>Ibid.</i> p. 164.
17	One mile out of Vezir Keupru	1	Nerva	—	—	<i>Ibid.</i> p. 164.
18	Near Inje Su	—	Nerva	—	—	<i>Ibid.</i> p. 165.
19	Near Inje Su	8	Sept. Severus	L. Petronius Verus	198	<i>Ibid.</i> p. 165.
20 ^a	Near Inje Su	—	Constantius and Maximian	—	305-6	<i>Ibid.</i> p. 166.
20 ^b	Near Inje Su	—	Probus	—	276-82	<i>Ibid.</i> p. 166.

The distribution of these milestones is very curious; and it is interesting to compare it with Ptolemy's divisions of the country. The road first traverses Armenia Minor from Satala to about Koilu Hissar. On this section milestones probably occur, for even if the three first stones on the list do not belong to our road, yet there are certainly stones on the branch roads, and the Lycus valley from Satala to Nicopolis has never been properly searched. At Koilu Hissar the road enters Pontus Polemoniaca, from which it issues again about Manas, on the ridge half way between Neo-Caesarea and Magnopolis. In Pontus Polemoniaca not a single milestone has yet been found on this or any other road, except one at Niksar belonging to the direct

¹ These first three stones may perhaps belong to other roads. I refer the stone at Melik Sherif (*C.I.L.* iii. 306) to the road from Satala to Melitene, and that at Akshihar or Ashklar near Nicopolis (*C.I.L.* iii. 6057,

R.G.S. Suppl. Pap. iii. p. 727) to the road from Nicopolis to Melitene. See Mr. Yorke's argument in *Geogr. Journ.* viii. pp. 467-8. Mr. Yorke, by an oversight, ascribes this stone to Trajan instead of Hadrian.

Amasia road, and it has probably been brought from a distance to serve its present purpose of base to a wooden pillar.¹ After Pontus Polemoniacus the road crosses the narrow tongue of Pontus Galaticus, which ran down to the coast between the Thermodon and the Iris and gave that inland country its own outlet to the sea by the road from Magnopolis to Themiscyra. In this narrow slip only ten or a dozen miles broad we have at least one stone, at Zilkhor; and had Mr. Anderson and I ridden along the Lycus instead of along the hill-side I have no doubt we should have found more.² At the Iris the road enters the 'Angle of the White Syrians,' in the bend of that river. It runs up the Sepetli Su to its source near Lake Stiphane.³ No milestones occur. At the head of Lake Stiphane begins the territory of Phazemon-Neapolis which was attached in the first century to Pontus et Bithynia and in the third to Galatia. The north shore of the lake has not been searched, but just beyond it at Achmet Serai milestones begin to appear, and are extraordinarily plentiful from that point onwards to the Halys. West of the Halys the road still awaits exploration.

I can offer no explanation of these curious facts, but they confirm and illustrate Ptolemy in a remarkable way. A good parallel case is to be found on the road from Caesarea to Melitene, where the milestones are precisely limited by the frontiers of Cataonia. I fancy that, if carefully studied, the distribution of milestones will be found a useful aid to the determination of boundaries.

The milestones record no less than twelve reconstructions of the road between A.D. 97 and 323. The road had been doubtless a 'royal road' of the Pontic kings, and was inherited by the Romans from them. Its first 'Romanization' may be ascribed to Nerva, whose stones are not only the earliest but the most magnificent of the series. It is noteworthy that the Pontic road dates from Nerva, whereas the Cappadocian starts with Septimius Severus. The former had the advantage of being the shortest land route between the Armenian frontier and the legions on the Danube. From the time of Vespasian the Danubian provinces were becoming more and more the headquarters of the Roman army, and for almost every great war in the east reinforcements had to be drawn from them. Perhaps the Pontic road and the short cut from Nicopolis to Zimara at first furnished the ordinary military communication with Melitene.

Of the emperors whose names appear on the stones most were at one time or another concerned with military operations on the eastern frontier. But of course few emperors had not their Parthian or Persian war; and some

¹ Even if this stone were nearly *in situ*, it could not affect my argument, for it is of Constantinian date and the boundaries were then different. Mr. Anderson reports another late stone near Zela.

² An exact parallel occurs on the road from

NeoCaesarea to Comana. Milestones do not occur until the valley of the Iris (Pontus Galaticus) is reached.

³ Can αἱ πηγαὶ τοῦ ποταμοῦ in Ptolemy refer to the source of the Sepetli Su? His Φαναγορία seems clearly equivalent to Stiabo's Φανάροια.

names are absent which might well have been expected. The most striking omission is Marcus Aurelius, whose legate Severianus doubtless advanced through Satala to meet his fate at Elegeia. But then Antoninus Pius had put the road in order, perhaps just before his death. In fact the road appears to have been carefully maintained in good repair. The recorded restorations are numerous, and fairly distributed over the two and a quarter centuries. The longest intervals are from Hadrian to Pius and from Pius to Septimius Severus. A good road was wanted for the service of the legion at Satala and its detachments in garrison across the border,¹ and was kept up equally in war or peace.

Apart from the milestones there are few material traces of the road. Only in the most desolate part of the Lycus valley, between Enderes and Niksar, is its dyke once or twice visible near a solitary fragment of a Roman bridge. The bridge at Manas may rest on ancient foundations, and the piers of the bridge over the Iris are at least built of ancient materials. The difficult approach to the latter from the right bank is rudely engineered by cuttings in the rock. Lastly there is the magnificent wreck of the Roman bridge on the Halys, which must have spanned the ordinary summer stream in a single arch over one hundred feet wide. The lofty abutment on the right bank is well preserved, and there are two bases for piers on the low ground opposite. Some remnants of pavement between this bridge and Narlu may possibly represent the old roadway. What traces may exist west of Halys must be left for other travellers to discover.

The considerable remains of the fortifications at Satala are described by Mr. Yorke (*Geogr. Journ.* viii. pp. 460-1). The walls, which in their present form appear to date from Justinian,² seem to have enclosed a square. They had towers at the corners and at intervals along the whole line, and are built of rubble faced with regular stonework. A little to the south-east are remains of earthworks, possibly a small fort to guard the water-supply brought from a reservoir by an aqueduct, of which five arches are standing.

An interesting memorial of the camp at Satala is a tombstone at Ortaklar between Khavsa and Vezir Keupru. The inscription (which will be published shortly by Mr. J. G. C. Anderson) commemorates one Valerius Saturninus who had returned to end his days in his native place after serving at Satala—*στρατευσάμενος ἐν Σατίλοις*.

Although it was an important element in the scheme of the frontier defences, the northern road plays only a very subordinate part in Roman military history. For many centuries the oriental enemies of the empire had their seat farther south, and both attack and defence moved on other lines, by diagonal routes across Asia Minor. Only in recent times has something like the conditions of the first two centuries recurred, and now once more an

¹ *E.g.* at *Καινὴ πόλις* (Artaxata), *C.I.L.* iii. 6052. Cf. 6741-2.

² Procopius, *De Aed.* iii. 1.

army corps, quartered at Erzingan within a few hours' ride of Satala, keeps watch on a disaffected Armenia and a host of northern invaders who press forward, like the Alans in the days of Arrian, through the passes of the Caucasus. But since the introduction of steamers to Trebizond and a railway to Angora the old land route has fallen into deep decay.

J. ARTHUR R. MUNRO.

September, 1900.

ARABIC LISTS OF THE BYZANTINE THEMES.¹

OF the themes of the Byzantine Empire there exists in Greek only one systematic account, the confused and discursive work of Constantine Porphyrogennetos, from which little trustworthy information as to the history of the themes before the accession of the Macedonian dynasty can be gathered.² The same author has also preserved a table of precedence drawn up by Philotheos the protospatharios in the year 899,³ which includes the generals of the various themes existing at that time; and he has himself given us a record of the salaries paid to the generals in the time of Leo VI.⁴ This lack of information may, however, be in part supplied from the Arab geographers, who provide us with five catalogues of the themes, the earliest of which, that of Ibn Khurdadhbah,⁵ is fifty years earlier than the list of Philotheos and about one hundred years earlier than Constantine's work. With this catalogue that of Al Idrisi (1154)⁶ is practically identical. The other three are that of Ibn Al Fakih Al Hamadhani (*circa* 902), preserved in the Geographical Dictionary of Yakut⁷ (1224), that of Kudama⁸ (*circa* 930), and that contained in the *Kitab Al Tanbih wal Ishraf* (Book of celebration and observation) of Al Mas'udi⁹ (956). Of these descriptions those of Ibn Khurdadhbah and Kudama have been translated into French by Prof. De Goeje, and that of Al Mas'udi by M. Carra de Vaux; of that of Ibn Al Fakih I give a translation below. The first four, though each contains matter not found in the others, closely resemble one another and are clearly

¹ The following article was already written before I saw the admirable work of Prof. Gelzer. *Die Genesis d. Byz. Thementverfassung* in the *Abhandl. d. Kon. Sachs. Gesellsch. d. Wissenschaften*, xli. No. V. which in part covers the same ground. But, though it has enabled me to make a few corrections and additions, it by no means makes my article superfluous, since the author makes no use of Ibn Al Fakih and very little of Al Mas'udi.

² There are also some notices relating to the themes in the *De Adm. Imp.* (Const. Porph. iii. pp. 220-231).

³ *De Cer.* 2, 52 (ed. Bonn i. pp. 713-715. 727, 728).

⁴ *Op. cit.* 2, 50.

⁵ Edited and translated by De Goeje (Bibl.

Geog. Arab. vi. p. 77 ff.). The date was probably 845-8 (*id.* p. xix. ff.).

⁶ Transl. Janbert ii. p. 299 ff. The full Arabic text remains unpublished. Al Idrisi gives only the Asiatic themes.

⁷ Ed. Wustenfeld. ii. p. 863 ff. The description of Macedonia is also in iv. pp. 602, 603, where it is cited as from 'Ibn Al Fakih in the account of the districts of the Romans.' An epitome of Ibn Al Fakih's work has been edited by De Goeje (*op. cit. pars v.*), but it does not contain the account of the themes.

⁸ Edited and translated by De Goeje (*op. cit.* vi. p. 197, ff.).

⁹ Edited by De Goeje (*op. cit.* viii. p. 176, ff.). translated by Carra de Vaux (Paris 1896).

derived from the same source. Al Mas'udi also seems to have used this source, but his description differs so widely from the others that he must be assumed to have used some other authority also. The three earlier authors give an identical list of fourteen themes, which in Kudama and Ibn Al Fakih are arranged as follows: 1 Talaya (Kud. Tayala), 2 Thrace, 3 Macedonia, 4 Paphlagonia, 5 Optimatoi, 6 Opsikion, 7 Thrakesioi, 8 Anatolikoi, 9 Seleukeia, 10 Cappadocia, 11 Charsianon, 12 Buccellarii, 13 Armenia, 14 Chaldia. In Ibn Khurdadhbah the first theme is called Tafla or Talaka, and Seleukeia and Cappadocia are placed at the end. As will be seen, and as is expressly stated by the authors, three of these are in Europe and eleven in Asia. Al Mas'udi also gives fourteen names; but of these five are in Europe and nine in Asia, his list being as follows: 1 Anatolikoi,¹ 2 Opsikion, 3 Thrakesioi, 4 Kibyrrhaiotai (?),² 5 Cappadocia, 6 Buccellarii, 7 Optimatoi, 8 Armeniakoi, 9 Paphlagonia, 10 Tayala, 11 Thrace, 12 Macedonia, 13 Peloponnesos, 14 Thessalonike. Besides these he mentions Seleukeia, Charsianon, and Koloneia as regions in the themes of Kibyrrhaiotai, Armeniakoi, and Paphlagonia respectively.³ He differs from the other authors by adding Peloponnesos⁴ and Thessalonike to the European themes and Kibyrrhaiotai and Koloneia to the Asiatic themes and omitting Chaldia. His description can, however, scarcely represent the state of affairs in his own time, since he takes no account of the themes of Mesopotamia and Lykandos, which were added by Leo VI.,⁵ and Seleukeia, which was raised to the rank of a *στρατηγίς* by Romanus I.,⁶ is called by him a 'region,' by which a *κλεισοῦρα* is no doubt meant. Otherwise, when we compare his list with Constantine's (which with the inclusion of Cappadocia and Charsianon, mentioned under Armeniakoi, contains thirty-one names;⁷) if we set aside the European themes, where we cannot expect accuracy, and the island

¹ 'Al Anti Mati [Optimatoi]. ...and that is the army of Al Natalik [Anatolikoi].' The Optimates are however mentioned later, and the description here following is clearly that of the Anatolikoi.

² 'Nantiliya (*c. l.* 'Nantuliliya,' and that is Dakabuli [Dekapolis]'. De Goeje supposes this to stand for Pamphylia: but it seems rather to represent Anatolikoi, though the description can hardly apply to any other theme than Kibyrrhaiotai.

³ The last clearly by error, since he says himself that the Armeniac theme reached to the sea. As to Seleukeia see Gelzer, p. 93, note, and below, p. 71, note 10.

⁴ The theme of Peloponnesos existed in 811 Anon. *de Leon. Arca*, in Bonn Corpus, xxx p. 336, and a seal of a *στρατηγός* is ascribed by Schlumberger (*Sigillographie de l'Empire Byzantin*, p. 179) to the eighth century. The passage adduced by Gelzer from Const. *De Adm. Imp.* (ed. Bonn, iii. p. 221, l. 3-10) to show that Peloponnesos was made a theme in the

time of Michael III. is insufficient to prove this. The omission of European themes cannot however be used to fix the dates of the Arabic lists, since all omit Hellas, which existed in 695 (Theoph. A M. 6187). This passage is neglected by Gelzer, who ascribes the institution of this theme also to the time of Michael III.

⁵ Const. Porph. iii. pp. 31, 32. Lykandos however was not made a *στρατηγίς* till the regency of Zoe (912-919): *ib.* p. 228.

⁶ Const. Porph. iii. p. 36.

⁷ The list in *De Uer.* 2. 50, differs from that in *De Them.* by omitting Optimatoi and Cyprus and adding Leontokomis and Dalmatia. As this list gives the salaries of the generals, the omission of Optimatoi is no doubt due to its being under a *δομέστικος*. The three lists in *De Uer.* 2. 52 include the *δομέστικος τῶν ὀπτιμάτων*, but omit Mesopotamia, Sebasteia, Lykandos, Seleukeia, Leontokomis, and Lombardy, probably because they were under officers of lower rank.

commander of the Paphlagonian forces called *κατεπάνω*,¹ while in our list he is entitled *στρατηγός*. If however the account of the installation of the various officers in Const. Porph. *De Cacr.* 2. 53, where we find the expression *προβαλλομένου δὲ ἐκ προσώπου στρατηγοῦ ἢ κλεισουράρχου ἢ κατεπάνω Παφλαγωνίας*,² refers to the Emperor's own time, we should probably infer that *κατεπάνω* was always the strict legal designation of the Paphlagonian commander, though he was commonly described as *στρατηγός*.³ It has however on other grounds been made clear that Al Garini's list dates 838–848 and Al Mas'udi's 845–863. Whether Kudama and Ibn Al Fakih drew directly from Al Garini or from the full text of Ibn Khurdadhbih⁴ there is no certain evidence to show; but probably the latter was the case, since Ibn Khurdadhbih was personally known to Kudama's father⁵ and is often cited by Ibn Al Fakih,⁶ while neither mentions Al Garini.

On examining Al Garini's list two remarkable points are at once apparent, the omission of Kibyrrhaiotai, which is peculiar to it, and the insertion of the puzzling Talaya, which it shares with Al Mas'udi. The former may in part be explained by supposing that the list is a military one and therefore takes no account of the naval theme,⁷ but the fact that in giving the boundaries of the themes he wholly ignores Kibyrrhaiotai, making Thrakesioi extend to the Southern Sea and to the borders of Seleukeia shows that the explanation lies deeper than this. Constantine in his description of Kibyrrhaiotai assigns to it the Isaurian coast-towns, which he also assigns to Seleukeia,⁸ and similarly in his account of the other naval theme of the Aegean assigns to it the coast extending from the promontory of Lekton to the Rhyndakos, which he also assigns to Opsikion.⁹ From these facts we may, I think, infer that the commander of the naval themes had at this time no separate territorial jurisdiction except in the islands, but for naval purposes exercised authority in the coast-towns, which remained in other respects under the jurisdiction of the military officers,¹⁰ and that, when a definite territory was assigned to Kibyrrhaiotai, the Isaurian coast-towns, which were not included in it, remained on their old footing with regard to that theme. As to Talaya the solution is more difficult. No Greek writer mentions any such

¹ Const. Porph. iii. p. 178; Theoph. Cont. p. 123.

² Const. Porph. i. p. 788.

³ He is called *στρατηγός* in 863 (Theoph. Cont. p. 181), and we find Paphlagonia described as a *θέμα* as early as the time of Michael II (Mich. Mon. *vit. Theod. Stud.* 54).

⁴ Our present text is incomplete (De Goeje p. xv. ff.)

⁵ *Id.* p. xxii. His account of the raiding-seasons (p. 199) clearly comes from Al Garini (see above p. 70), but may have been in the full text of Ibn Khurd.

⁶ De Goeje *B.G.A.* v. p. xii.

⁷ In the work of Philotheos (Const. i. p. 715) we find Kibyrrhaiotai among the western

themes. See also Gelzer p. 105.

⁸ Const. iii. pp. 35, 38.

⁹ *Id.* pp. 25, 43, 44.

¹⁰ It may have been this fact which led Al Mas'udi to make the mistake of making Seleukeia part of Kibyrrhaiotai. It is however possible, but not likely, that before 863 a territory had been assigned to the commander of the Kibyrrhaiotai and the *κλεισουράρχης* of Seleukeia placed under him. The expression '*τῷ ἀκρωτηρίῳ τῶν Κιβυρραίων τῷ λεγομένῳ Χελιδονία*' (Geo. Mon. p. 720) does not prove territorial jurisdiction, since George is speaking of naval affairs and therefore writing from the naval point of view.

theme, and Constantine expressly says that Constantinople, which the Arabs include in Talaya, was in the theme of Thrace. But, though it may have been reckoned as geographically part of Thrace, the troops in the capital were doubtless not under the *στρατηγός* of Thrace but probably directly under the *δομέστικος τῶν σχολῶν*,¹ and we may perhaps infer from the Arabic writers that his immediate authority extended to the long wall. This however still leaves the name unexplained, and it is very difficult to find a satisfactory explanation of it. Prof. De Goeje, adopting the less-attested reading 'Tafra,' takes it to represent *Τάφρος*, and this explanation is accepted by Prof. Gelzer; but I do not know any instance of this word being used with this geographical meaning and should rather take the Arabic word to be a corruption of the name of some military force, perhaps connected with *παλάτιον* or with *τάγματα*.²

As to the information supplied by Al Garni, besides the doubtful case of the *στρατηγός* of Paphlagonia, his list contains the earliest record of the theme of Chaldia and of the *κλεισοῦραι* of Seleukeia and Charsianon,³ and the latest mention of Cappadocia as a *κλεισοῦρα*.⁴ He also throws much new light on the boundaries of the themes. On other points of interest I have added notes to the translation of the catalogue of Ibn Al Fakih, which follows. At the end of the catalogue I have given a translation of a comment of Yakut, which throws some interesting light on the changes which had taken place in Asia Minor during the three hundred years between Ibn Al Fakih's time and his own.

Catalogue of Ibn Al Fakih.

Ahmad the son of Mahomet, the Hamadhani,⁵ says: 'The whole number of the provinces of the Romans which are known and named and an accurate report of which has reached us is fourteen provinces, three of which are beyond the Khalig' and eleven on this side of it. And the first of the three beyond the Khalig is called Talaya (?), which is the district of Al Kustantuniya (Constantinople); and its boundary on the eastern side is the Khalig which starts from the sea of the Chazars and extends to the sea of Al Sham [Syria], and on the south the sea of Al Sham, and on the west a wall which reaches from the sea of Al Sham to the sea of the Chazars and is called Makton Teichos, the meaning of which is 'the long wall'; and the length of it is four days' journey, and it is about two days' journey from Al

¹ Gelzer (pp. 87, 88) believes that they formed an actual theme under the prefect of the city and that this was suppressed by Leo VI. This is plausible, but the evidence for the military authority of the prefect is very weak.

² See De Boor's index to Theophanes s.c. *τάγμα*. Talaya might also represent *τὴν αὐλήν* or 'τὰ ἐν τῇ αὐλῇ:τάγματα.' It is a tempting but somewhat too daring conjecture that it stands for 'τὴν Ἑλλάδα,' and that Al

Garni through some blunder supposed this to be Constantinople. This would explain the apparent omission of Hellas.

³ Charsianon is mentioned as a *κλεισοῦρα* in 863 (Theoph. Cont. p. 181). See also p. 70, note 3.

⁴ It was a *στρατηγία* in 863 (Theoph. Cont. l.c.) and appears as such in Al Mas'udi.

⁵ I.e. Ibn Al Fakih.

⁶ See *J.H.S.* xviii. p. 191, note 5; xix. p. 23.

Kustantiniya. And most of this district consists of the estates of the king and the patricians and meadows for their cattle and draught-animals. And in describing the districts of the Romans I have not been able to attain exactitude and orthographic correctness in the names, and I beg any one who inspects my book to forgive this. But, if any one had aptitude and knowledge and had obtained information as to any of them, I listened to his laudable correction.¹

And beyond this province is the province of Trakiya (Thrace); and its boundary on the eastern side is this long wall, and on the south the province of Macedonia,² and on the west³ the districts of Burgan (Bulgarians), <and on the north the sea of the Chazars, and its length is>⁴ fifteen days' journey, and its breadth from the sea of the Chazars to the boundary of the province of Macedonia three days' journey. And the seat of the intratighus [στρατηγός] (the wali)⁵ is a fortress called Arkada (Arkadioupolis), seven days' march from Al Kustantiniya; and its army consists of five thousand men.

Next the province of Macedonia; and its boundary on the east is the long wall, and on the south the sea of Al Sham, and on the west the districts of the Sakaliba [Slavs], and on the north the districts of Burgan: and its breadth is five days' journey,⁶ and the seat of the intratighus (meaning the wali)⁷ is a fortress called Bandus⁸; and its army consists of five thousand men.

Now these three districts are those which are beyond the Khalig; and on this side of the Khalig there are eleven provinces; and the first of them in the country lying upon the sea of the Chazars extending to the Khalig of Al Kustantiniya is the province of Aflaguniya [Paphlagonia]; and the first of its boundaries marches upon Al Antimat [Optimatoi],⁹ and the second is the sea of the Chazars, and the third marches upon the Armeniakoi, and the fourth upon the Buccellarii: and the seat of the intratighus is Ayalai (?), which is a village, and a town called Naikus (Nikopolis?), and he has another seat named Siwas (Sebasteia ?)¹⁰; and its army consists of five thousand men.

¹ It is not clear whether this apology is to be ascribed to Ibn Al Fakih or to Yakut.

² From the omission of the 'Khalig' among the boundaries and the statement below that the E. boundary of Macedonia was the long wall it is clear that the Thracian theme did not reach to the Propontis.

³ Al Garin seems to have been in some confusion as to the points of the compass, since Bulgaria was clearly the N. and the Euxine the E. boundary. Similar errors are often found in Kudama, who, unlike Ibn Al Fakih, gives the points of the compass for the Asiatic themes also.

⁴ The sentence, as it stands in the text, can hardly be translated, and a comparison with Ibn Khudadhibah and Kudama shows that these words have fallen out.

⁵ The explanation is perhaps due to Yakut.

⁶ The length has perhaps fallen out.

⁷ Clearly an insertion of Yakut.

⁸ Wustenfeld suggests Abydos: if this is right, there must be some confusion. Possibly Kassandria is meant, but more probably the author has taken *βάνδον* for a proper name: cf. Al. Mas. p. 176: transl. p. 239 and note.

⁹ This shows that Paphlagonia reached much farther west than in Constantine's time, when it stopped at the Billaïos, the intervening space being occupied by the Buccellarii (Const. iii. pp. 28, 29). That this is not a mere slip appears from the fact that our author places Optimatoi 'by the side' of Paphlagonia. See also p. 76, note 3. Al Mas. however makes Buccellarii extend to the sea, and the change had therefore been made before 863. Kudama in describing the boundaries of Optimatoi includes Paphlagonia and omits Buccellarii.

¹⁰ Neither Nikopolis nor Sebasteia can ever have been in Paphlagonia, and at the end Yakut says that Sebasteia is not mentioned by Ibn Al Fakih. Moreover Siw is seems to be a form of

And by the side of it is the province of Al Antimat [Optimatoi]; and its first boundary is the Khalig;¹ and its army consists of four thousand men. And the men of this province are devoted to the king's service and are not men of war.²

And by the side of it is the province of Opsikion; and its first boundary is the Khalig, and its second Al Antimat, and its third the province of Al Natulikus [Anatolikoi], and its fourth the province of Brakisis [Thrakesioi];³ and the seat of the imtratighus is the fortress of Batana;⁴ and its army consists of six thousand men.

And by the side of it is the province of Brakisis [Thrakesioi]; and its first boundary is the Khalig,⁵ and its second Opsikion, and its third the province of Al Natulikus, and its fourth the sea of Al Sham⁶; and the seat of the imtratighus is in the fortress of Al Warithun; and its name is Kaniyus, and Al Warithun is the name of the district; and its army consists of ten thousand men.

And by the side of it is the province of Al Natulikus [Anatolikoi], the meaning of which is 'the east'; and it is the largest of the provinces of the Romans;⁷ and its first boundary is Opsikion and Al Brakisis, and its second the province of the Buccellarii;⁸ and the seat of the imtratighus is Marg Al Shalm;⁹ and its army consists of fifteen thousand men; and with him are three turmukhs [τουρμάρχαι]. And in this province is 'Ammuriya [Amorion], which is at the present day waste, and Balis [Barbalissos] and Manbig [Hierapolis] and Mar'ash [Germanikeia],¹⁰ and that is the fortress of Burghuth.

Turkish origin, and the name is here spelt differently. For 'Nakus' we might by a change of points read 'Byafus' or 'Babufus', which might be a shortened form of Pompeiopolis, or 'Nitus' (= Sinope?). For 'Siwas' there is a variant 'Sulas.'

¹ The other boundaries and the seat of the στρατηγός have perhaps fallen out.

² 'τὸ καλούμενον ..θέμα Ὀπτίματος οὐδεμίαν ἔχει κοινωνίαν πρὸς θέματα· εἰς γὰρ δουλείαν μόνην προσειληπται διὰ τὸ εἶναι αὐτὸ οἰκτρότατον καὶ μήτε τούρμαις μήτε δρούγγοις τετιμημένον .. εἰς γὰρ ὑπηρεσίαν ἐτέτακτο τῶν στρατιωτῶν.' Const. Porph. iii. p. 26.

³ The omission of Buccellarii (so also Kudama) shows that at least at this time the Anatolic theme reached farther north than is usually supposed (see also p. 76, note 3), the boundary being probably the northern portion of the Sangarios. Janbert's identification of Marg Al Shalm, the seat of the Anatolic στρατηγός, with Gema (see *J.H.S.* xix. p. 31) is therefore not impossible.

⁴ With an alteration of points we may read 'Nitaya,' which closely resembles Nikana. Koryaion may also be suggested.

⁵ The author can hardly mean to make Thrakesioi reach to the Hellespont, and Kudama distinctly makes the Khalig the W and the Syrian Sea the S. boundary. The 'Khalig' must therefore here include the Aegean, which in the descriptions of Macedonia and Talaya is included in 'the Sea of Al Sham.'

⁶ The omission of Seleukeia (so also Kudama) is apparently an oversight of Al Gami, since Thrakesioi is given among the boundaries of Seleukeia.

⁷ Territorially it would appear that Thrakesioi was larger, but the author is probably thinking of the size of the army.

⁸ The other boundaries have perhaps fallen out.

⁹ See *J.H.S.* xiv. p. 190 note 1; xix. p. 31 *ad fin.* The reading of Ibn Khurd. however, which is unpointed, seems to be meant for 'Burg Al Takhm' (tower of the boundary), for which 'Marg Al Shalm' should no doubt be restored with De Goeje from Al Idrisi.

¹⁰ The occurrence of these three names in this place is very puzzling. Hierapolis was not Byzantine till 968, and Barbalissos cannot have been so earlier, nor can any of the three

And by the side of it in the direction of the sea is the province of Seleukeia; and its first boundary is the sea of Al Sham, and its second the province of Al Brakisis, and its third the province of Al Natulikis, and its fourth the passes of Tarsos in the direction of Kalamiya [Zephyrion]¹ and Al Lamis [Lamos].² And the name of the ruler of this province is khisliyug [κλεισουράρχης],³ and his rank is lower than that of the intratighus; and the meaning of the word is 'ruler of the passes' and it is said that the meaning is 'the king's face';⁴ and his seat is Seleukeia by Antakhiya [Antioch].⁵

Next there adjoins it the province of Al Kubadhak [Cappadocia]; and its first boundary is the mountains of Tarsos and Adana and Al Massisa [Mopsouestia], and its second the province of Seleukeia,⁶ and its third the province of Tulighus⁷ [Anatolikoi], and its fourth the province of Al Samalar [Buccellarii] and Kharshana [Charsianon]; and the seat of the khisliyug is the fortress of Kura [Koron];⁸ and its army consists of four thousand men. And in it are many strong fortresses, and among its districts are Kuriya or Kuniya [Ikonion?]⁹ and Malakuniya [Malakopea] and Gardiliya (?) and others

And adjoining it is the province of Kharshana [Charsianon]; and its first boundary is the province of Al Kuyar [Cappadocia]; and its second the pass of Malatiya [Melitene], and its third the province of the Armeniakoi, and

have been in the Anatolic theme. Moreover Ibn Khurd. places Burghuth in the Anatolic theme, but without identifying it with Mar'ash, which was not in his time Byzantine. Nor can this be an insertion of Yakut, in whose time these places had long been lost to the Empire. Probably therefore there is some corruption and the words belong to another context.

¹ See Tomaschek in *Sitzungsber. d. Wiener Akad.* cxxiv. VIII. p. 67.

² Either the river or the town may be meant. Between Seleukeia and Al Lamis Al Mas'udi mentions a fort which De Goeje prints as 'Bukiya.' There is however a variant 'Brakia' or 'Brakana,' and no doubt Prakana is meant (cf. Tomaschek p. 60).

³ The translation following shows this to be the title meant, and Seleukeia is in fact called a κλεισούρα by Const. Porph. (iii. p. 35): cf. Theoph. Cont. p. 181. Wüstendfeld however corrects the word to 'khlilyag' = χιλιάρχος. This is no doubt also the meaning of Ibn Khurd.'s expression. 'and its wali is the ruler of the passes,' which is obscured in De Goeje's translation.

⁴ This no doubt refers to the title ἐκ προσώπου, of which several examples are found on seals (Schlumberger, *Sigillographie de l'Empire Byzantine*, p. 576 ff.); cf. also Const. Porph. iii.

p. 230; i pp. 715, 729.

⁵ The obscure Antioch in Isauria must apparently be meant, but even this is eighty miles from Seleukeia. Moreover the preposition should rather mean 'as far as,' and the omission of the strength of the army perhaps points to some words having fallen out. Read perhaps, 'and its army consists of 5,000 men (Kud.), and it reaches from Seleukeia to Antakhiya.'

⁶ So Kudama. This shows that, as we should expect, the κλεισουραρχίαι of Seleukeia and Cappadocia now adjoined one another and were not divided by a piece of Anatolikoi, as in the maps of Menke and Gelzer. Al Mas. however extends Anatolikoi to the frontier and places Herakleia in it, so that a change had been made before 863.

⁷ *V.L.* 'Tulifus,' which differs only by a point from Tulikus.

⁸ 'φρούριον τῷ καλούμενον Κόρον' (Const. iii. p. 21). See also *Eng. Hist. Rev.* xv. p. 742 and Ramsay *H.G.* p. 355.

⁹ Ikonion was in the Anatolic theme (Const. iii. p. 16), and Yakut at the end states that it was not mentioned by Ibn Al Fakih. Probably therefore the name is corrupt. Ibn Khurd. has 'Karniya' or 'Kutiya' and Al Mas. 'Kaniya' or 'Kunana.' Kanna may perhaps be suggested.

its fourth the province of the Buccellarii; and the seat of the khishiyug is the fortress of Kharshana: and its army consists of four thousand men. And among the fortresses in it are Kharshana and Dhariga,¹ [Saricha]² and Ramhasu (?) and Barukta (?) and Maklathiri (?).

Next there adjoins it the province of Al Balaghar [Buccellarii]: and its first boundary is the province of Al Natulikis, and its second Al Kubadhak and Kharshana, and its third the province of the Armeniakoi, and its fourth the province of Afaguniya³; and the seat of the imtratighus is Ankyra, in which is the tomb of Amru'l Kais (and it is mentioned in its place)⁴; and its army consists of eight thousand men, and with its ruler are two turmukhs; and in it are fortresses and many districts.

Next there adjoins it the province of the Armeniakoi; and its first boundary is the province of Afaguniya, and its second the province of the Buccellarii, and its third Kharshana, and its fourth Galdiya [Chaldia]⁵ and the sea of the Chazars; and the seat of the imtratighus is the fortress of Amaseia; and its army consists of nine thousand men; and with him are three turmukhs; and in it are many districts and fortresses.

Next there adjoins it the province of Galdiya [Chaldia]; and its first boundary is the district of Armenia (and its inhabitants are at variance with the Romans⁶ and are contiguous to Armenia), and its second the sea of the Chazars, and its third the province of the Armeniakoi, and its fourth also the province of the Armeniakoi; and the seat of the imtratighus is Ikrita,⁷ and its army consists of ten thousand men, and with him are two turmukhs; and in it are districts and fortresses. Al Hamadhani says: And this is the whole number of the provinces of the Romans which are known to us on the land. Over each province among them is a wali representing the king, who is called the imtratighus, except the ruler of Al Antimat, and he is called the domestic, and the ruler of Seleukeia and the ruler of Kharshana, and each of these is called the

¹ *I. l.* 'Sariga.'

² See Ramsay *H. G.* p. 312. There is some difficulty about the occurrence of this name here since in Theoph. Cont. p. 369 we read of 'τὸν ἐν τῇ Σιρχῇ στρατὸν,' and from Const. in. p. 225 we learn that 'ἡ τοποσηρησία τοῦ τιμίου Στρατοῦ' was transferred from Buccellarii to Charsianon by Leo. Either there were two 'στρατοί,' or the place had been at an earlier time transferred from Charsianon to Buccellarii.

³ The omission of the sea among the boundaries shows that the statement above as to the Paphlagonian theme (see p. 73, note 9) is not a mere slip. A similar deduction as to the extension of Anatolikoi may be made from the omission of Opsikion (see p. 71, note 3). Optimator, which is given among the boundaries by Kudama, has probably been omitted by an oversight.

⁴ Clearly an insertion of Yakut, in whose work the story of Amru'l Kais is recorded under 'Ankyra.' It is not unlikely that the whole reference to Amru'l Kais is due to him.

⁵ From these boundaries we might at first sight infer that the Armeniac theme did not at this time extend to the frontier but was separated from it by Chaldia and Charsianon. As however Chaldia is not mentioned among the boundaries of Charsianon or *vice versa*, the omission of Thughur Al Gazira among the boundaries of Armeniakoi seems to be only an oversight.

⁶ The Paulicians are perhaps meant; but, if so, the passage can hardly date earlier than 813. Moreover their chief centre was in the Armeniac theme.

⁷ See *Eng. Hist. Rec.* xv p. 740.

khisiyung.¹ And over each of the fortresses of the Romans is a man stationed in it who is called barkilis(?),² who judges among its inhabitants.

Comment by Yakut.

I say: These regions and names seem to me to belong to former days, and I do not think that they still exist at the present time, but the names of the districts and the names of those chief towns have been changed: and of the important places which we know to exist to-day in the districts of the Romans in the hands of the Moslems and of the Christians not one is recorded, such as Kuniya³ and Aksara [Archelais]⁴ and Antakhiya⁵ and Atrabizunda [Trebizond] and Siwas⁶ as well as others of the most celebrated in their districts. But indeed I have recorded it as it is recorded: and God knows.

E. W. BROOKS.

ADDITIONS AND CORRECTIONS TO *J.H.S.* XIX. Pp. 19-33.

P. 20 l. 3 ff. Prof. De Goeje points out that Al Mas'udi (*Tunbil* p. 166) rightly places the retreat in A.H. 100.

P. 26 note 2. The name Serantapechos occurs also in Theoph. A.M. 6295, where Kedrenos has Tessarakontapechys. A Constantine Tessarakontapechys is mentioned in the time of Michael II (Genesios p. 48).

P. 28 l. 20. Prof. De Goeje points out to me that in place of 'the victory was gained by this artifice' the rendering should be 'this artifice became manifest.'

P. 31 l. 18. The whole of Al Tabari is now published. The extract given under A.H. 33 is cited by him from Al Wakidi.

CORRECTIONS TO *J.H.S.* XVIII. P. 208.

L. 6. Through misreading a letter I rendered this wrongly. It should be 'called the pass of Al Hadath Al Salama [safety] on account of [*i.e.* to avoid] the ill omen, because . . . , and that was the disaster (hadath) etc.'

L. 14. For 'king of the summer-raids,' read 'master of the summer-raids' ('mālikh,' not 'mālikh').

L. 18. For 'divided the captured arrows,' read 'distributed the spoil.'

¹ The author has also applied this title to the governor of Cappadocia. He omits to note that the commander of Opsikion was called count.

² Possibly κομμερκιάριος.

³ See p. 75, note 9.

⁴ See Ramsay, *H. G.* p. 285.

⁵ *I.e.* Antioch in Pisidia.

⁶ See p. 73, note 10.

PRIMITIVE PAINTED POTTERY IN CRETE.

[PLATE VI. VII.]

SUCH remarkable additions were made by last season's excavations at Knossos and in the Dictæan Cave to the small number of known specimens of pre-Mycenæan painted pottery of Cretan fabric, that it is worth while to deal with this ware anew.

It was first made known by Mr. J. L. Myres, after he had seen and drawn, in the Syllogos Museum at Candia, certain fragments said to have been found in a cave on the southern slope of Ida, two and a half hours above the village of Kamares. In his communication to the Society of Antiquaries (March 14th, 1895. *Proc.* XV., iii., pp. 351-356, Plates i-iv.) Mr. Myres rightly apprehended the period, character and affinities of this new and singular variety of early Aegean pottery. The colouring of his drawings, however, not having been applied with the models in sight, was not quite correct, and many of the fragments were republished by Dr. L. Mariani, (*Monumenti Antichi*, Vol. VI., Plates 9-11, pp. 334-342), but in some cases were not improved upon. From the reported place of first finding this fabric is commonly called "Kamares" ware.

No more of it was found for some years. While excavating the lower prehistoric town of Knossos in March last, however, we lighted on many Kamares vases and fragments, and were able to establish the fact that, so far from that ware being a rarity, it is to be looked for in Crete wherever any strata of remains underlie the Mycenæan. It occurred in our digging at Knossos at all points at which the early town was probed to the rock. On the Kephala hill, where the lowest stratum of deposit is a dusty yellow clay full of Neolithic weapons and sherds, Kamares sherds occur, where stratified, immediately above that stratum. No such ware was found in the Mycenæan stratum of the Palace, but wherever the remains below the upper plane were laid bare, it was observed; and it is from a low level in this region that was obtained the remarkable "dove" vase (Fig. 1). This is, of course, hand-made, with a hole-mouth in the fore part, and covered with a body glaze originally black, on which white and red colouring has been applied in stripes: but the colour is much decayed.

This ware was not, however, all stratified. Several accumulations of it were found filling receptacles in the immediate neighbourhood of houses, in which very few of its fragments occurred and the pottery was almost exclusively of Mycenæan period. The first such receptacle was a plastered

pit 1.70 deep, to N.W. of the group of houses opened at the south end of the town (v. *B.S.A.*, VI, Plate XII., Nos. 5-8, and also Plate VII., where this pit is marked *Cistern*; and pp. 70 ff.). In this, lying on their sides, and at one point forming a foundation to a wall of the later Mycenaean period, were several almost complete vases, including the finest painted *schnebelkanne* of this fabric known hitherto (Plate VI. *a*), and hundreds of fragments mostly of unpainted cups of metallic type (v. *infra*, p. 91). Close by this pit we opened three circular excavations, sunk from 3 to 10 feet into the soft rock. They can have been neither wells, for their lowest point is far above the water level of the vicinity, nor cisterns, because not being plastered they would not have retained water. Possibly they were originally intended for the storage of grain; but more probably they were cut, as the trench in the Apollo precinct at Naucratis was cut, to contain what was actually found in

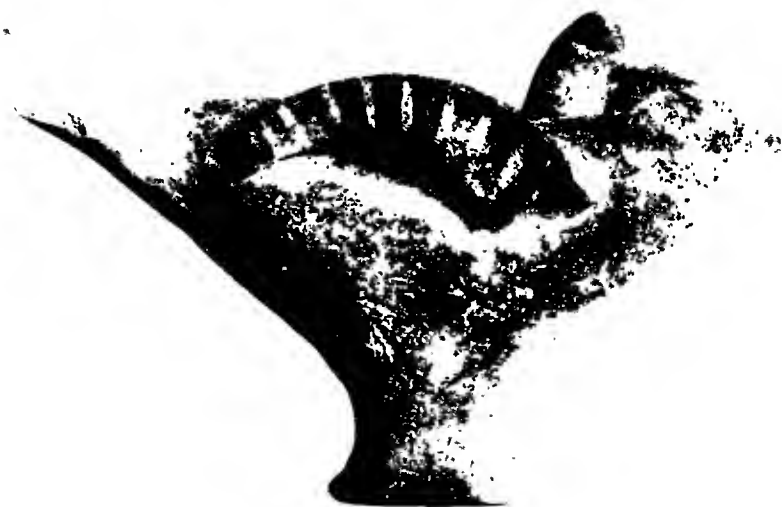


FIG. 1 (*circa* 1 : 2).

them, namely a mass of broken pre-Mycenaean vases and other rubbish, evidently cleared out of the neighbouring houses when restored after the conflagration of which the larger (A in *B.S.A.*, VI, Plate III.) shows traces. Among the hundreds of fragments, unmingled with anything Mycenaean, taken out of these shafts, was the cup figured in colours on Plate VII. *a* and the sherds on Plate VII. *d, f, g, h*.

A similar excavation, irregularly oblong, and a little over 3 feet deep, was found on the Kephala hill, sunk in the rock under the floor of a house (*B.S.A.*, Plate XII., No. 12), and filled to the brim with coarser sherds of the same fabric (among them Fig. 24). The house has gypsum walls of a similar type to the outer wall of House A, and belongs to the same primitive period. Like A, it was cleared out and reinhabited in the Mycenaean age; and remains of later structures, first of the Geometric time and subsequently

of the Roman period, were found disposed at incongruous angles in the strata above.

At a point (*B.S.A.*, Plate XII, No. 13) on the same slope as the first houses (A., B) but higher up the right bank of the torrent, where scanty house remains exist in a much denuded condition, a well was cleared to a depth of 44 feet and found to contain much Kamares pottery, without admixture of anything later. From a depth of only 15 feet were obtained the fluted bowl (Fig. 16) and the lily vase (Plate VI. *b*).

Lastly, in two localities on the western Kephala slope (Nos. 10 and 12 *B.S.A.*, Plate XII.), accumulations of this ware were found, not in definite receptacles, but heaped up outside houses on the yellow clay bed, which contains Neolithic remains. In the first case the heap lay in a narrow passage dividing two houses. On the top of it lay the "lamp" (Fig. 25), with several other fragments of the same singular ware. Under this all was true Kamares stuff, including the two "fruit-dish" stands (Plate VII. *c*, and Fig. 15), the cup (Plate VII. *b*) and the small *schnebelkanne* (Plate VI. *c*). The second of these heaps supplied the richest find of this ware yet made. It was in the corner of what seems to have been a small yard on the south side of the house, already described above as having under the floor of one room an oblong pit brimfull of sherds of the same ware. The heap was about two metres in circumference by half a metre deep, and it yielded, among hundreds of fragments, two long-footed vases (Figs. 8, 9), the "corn vase" (Fig. 7), two small vases (Figs. 18, 19), and one which bears the double-axe painted on its side (Fig. 12).

Both Mr. Myres and Signor Mariani have well described the technique employed in this fabric, but with so many new types of form and decoration to be compared, its features may, without offence, be recapitulated here.

In the larger and coarser Knossian vases the clay, when baked, is a reddish brown, largely filled with white or black grains, while in the finer specimens it is a good red or yellow; but specimens of all intermediate degrees of excellence are found, the finest being equal to the best Mycenaean clay. It is very difficult to decide if there is any finer slip of clay applied to the surface before the paint; in some of the more delicate vases this is probably the case. With the exception of coarse large jars, all seem to be wheel-made. In some of the larger specimens the paint is applied directly to the natural surface without the interposition of any medium; but usually we find a fine glaze, varying from light red-brown through a chocolate tint to a deep purple-black, the darker shades being the commonest. In poorer specimens the glaze is thin and hardly lustrous at all, or at the most only so in parts, while it is often carelessly applied, so that the colour varies greatly in intensity: yet we often have the best glaze used with very coarse vases. The paint used is, in the present state of the vases at least, of a very powdery nature, but this is probably due to the damp: the primary colour seems to have been white, which is helped out by various shades of red and brown, especially a cherry red: and while we often find white solely applied, especially

on more primitive forms, we never find the other colours except in conjunction with white. Beside this pure white a thick dull creamy-looking wash is often used to cover large surfaces, more especially the upper half of vases. The larger vases are usually exceedingly coarse and clumsy, while in some of the finer small vases the sides are so thin as quite to merit the term of "egg-shell" ware.



FIG. 2.



FIG. 3.

In addition to paint, the Kamares potter made great use of moulding and relief work. In its simplest form this consists of plain ridges, usually at the junction of neck and body (Fig. 8 has a row of wedge-shaped knobs). or disposed horizontally in groups of two or three round the body of the vase. Among more elaborate patterns are a herring-bone device (Fig. 3) and a grass-like plant (Fig. 2), while coarser specimens (Figs. 4, 5) are covered with



FIG. 4.



FIG. 5.

large bosses, and the specimen on Plate VII. *h* has circles of small knobs, alternating with painted dots. Several specimens (Plate VI. *a*) have a set of tooth-like projections along the edges of the lip. However, the commonest device, which is very characteristic of the ware, is the "finger-mark" pattern, where a series of small ridges cross and re-cross each other at various angles, giving the curiously blistered appearance of the specimens in Plates VI. *a* and

VII. *g*. In one case we find circles of this pattern, edged with tooth-like projections, exactly like the teeth of a cog-wheel. The pattern is usually applied in metope-like divisions, and the effect is heightened by the use of dots of white paint, or by a layer of creamy wash. The most elaborate instance of moulding is seen on the curious vase which has ears of corn or bunches of grapes.

Here we may note that certain groups of Kamares ware seem based on metallic prototypes. In the first place the hard black glaze and thin sides clearly point to some such original, while the special type of small cups (Plate VII. *a* and *b*), is a direct copy (except for the handle) of a metal cup of the type of the Vaphio or Kefti specimens: we see reproduced in clay the sharp angles, thin sides, and even the handle-rivets of the original: whilst the flat broad clay handle is equally metallic in appearance and origin: probably too the fluted spirals of Figs. 16, 22 are due to the same causes. Similarly the circles, formed by small holes, are copies of fine chisel-work on a metal cup (*cf.* the sherds from Melos, Figs. 30, 31), whilst in vases like Plate VII. *d*, the roll of clay round the junction of neck and body reproduces that of the silver vases of Mycenae. We can only assert this metallic character of one, or at the most two, classes of Kamares pottery, the rest being of the usual clay types.

On turning to the system of decoration, it is plain that this pottery is more primitive than that of Mycenae. In striking contrast to the Mycenaean potter, who, using the whole surface of the vase, covered it with a bold freely-drawn subject, often taken from plant life, the Kamares potter loves to subdivide the surface by horizontal or zigzag lines into zones, which are carefully filled with small geometric patterns, often of very complicated appearance: in fact, he seems to rely on striking combinations and contrasts of colour and complicated designs, rather than on graceful, life-like drawing. Yet among these geometric patterns there are but few of a really primitive appearance: on the contrary, many seem to have already reached a low stage of degradation, where all idea of the original is lost: *e.g.*, the cable-pattern, and the leaves of Plate VII. *c*: while the pattern of Plate VII. *d* closely approaches that of some of the Orientalising wares of the Ionic circle, especially Naucratis.

On tall jars the decoration is usually confined to the upper half, the rest being plain or covered with sets of horizontal bands. Among the various elements of decoration, by far the greatest number are composed of plain lines or curves: we may note the extensive use of zigzags; triangles disposed one inside another; series of parallel angles; broad bands covered with dots; various sorts of crosses; lines toothed like a saw (a favourite element in Cretan pictographic gems); sets of short parallels, especially along the edges of vases. Of curvilinear elements the chief are circles, usually concentric, and groups of concentric semi-circles, which may be only degraded forms of the festoon, which appears so commonly. By far the commonest ornament is the plain dot, with which large zones are often covered, and which is used in rows to border plain lines, circles, &c. The spiral is fairly common, and so is

the disintegrated cable-pattern, which may be a degraded spiral. The vegetable world is represented by the rather well-drawn lily of Plate VI. *b*, which is the only pattern at all true to nature: other plant-types are the leaves common on the Dictæan Cave specimens (*B.S.A.* VI. Fig. 27), which seem to have originally formed a branch: in some specimens the central stalk is still retained, while Fig. 6 gives a row of disjointed leaves, exactly similar to those on early Ionic vases. A few fragments show stalks of grass disposed obliquely round the vase, as in the Mycenaean ware of Knossos, and the proto-Mycenaean of Melos. Flowers are represented on the cylindrical object, (Plate VII. *c*), much in the form of the flower (?) on a Cretan gem, *J. H. S.*, XVII., p. 336, Fig. 6c., and the rosette is very common, usually in the form of a central dot, surrounded by one or more circles of similar dots. The plant design of Plate VII. *d* has been already noticed.



FIG. 6.

The following is a more exact description of the various types and specimens: the chief shapes are not numerous, and are of simple form, divided roughly into two main classes, the first being of a more rounded type, the second showing the angular forms of metallic originals.

A. Schnabelkannen.

(1) The earliest form is shown by two rather squat flat-based vases, leaning over considerably to one side, with no neck, and with handle running from high up on the shoulder to the top. On the spout are two pellets of clay, representing eyes. Both are in coarse brick-like clay with poor black glaze; height, 22 and 25 cm. With this shape we may compare the *schnabelkanne* that appears commonly on early Cretan gems, *e.g.*, *J. H. S.*, Vol. XIV., Fig. 21 c.

(2) The same squat type, but upright, and of fine red clay. On the black glaze a naturalistic design is painted in white, consisting of two feathery plants, and between them a lily with red-tipped stamens, all three rising obliquely from the base. Round the neck a band of red, between two bands of white, and round the spot, where the handle joins the body, a white semicircle. Height, 11 cm. Plate VI. *b*.

(3) Same squat type, but the spout is upright. On a fine black glaze, a spiral in white rises from the base on the front of the vase: in its centre is a circle of white dots, enclosing a smaller circle of red and white dots. Height, 11 cm. Plate VI. *c*.

A similar specimen was found unpainted, with broad flat handle. Height, 11 cm.

(4) Broad squat type, with distinct neck and upright spout. On the fine red clay is a black glaze, on which are narrow horizontal white bands, covering the whole surface. Height, 20 cm.

(5) Taller, slenderer type, in coarse red clay, with poor dull red glaze. In addition to the usual handle, on each side of the neck are two vertical loop-like handles, one above the other, but now broken off. The lip has a slight rim, from which descend a number of short white lines. Height, 35 cm.

Fragments of a similar vase, about 25 cm. high, had painted on the red surface of the neck a white band, from which parallel zigzags ran up to the lip

below which were two eye-like knobs. A third broken vase, about 28 cm. high, has a ridge round the neck, from which white lines descend to the base. A small very much worn vase of the same type has a flat handle with concave section, stuck on afterwards, like a metal handle: and lastly a broken neck shows an extra handle under the spout.

From these simpler types we proceed to the more grotesque and exaggerated specimens.

(6) A small vase of fine red clay, full of black grains. The spout is nearly upright, but, in contradistinction to other specimens, this vase has developed a low foot. In front is moulded a pattern consisting of three ears of corn or bunches of grapes (?), below which is an irregular patch of the "finger-mark" pattern, which recurs below the handle. The glaze is dark brown, and the body and foot, except where occupied by the moulding and finger pattern, are covered with small white dots. Round the neck are two narrow grooves. Height, 10 cm. Fig. 7.



FIG. 7.

(7) This vase, though it has no foot, is in some ways a prototype of the next two specimens. The shape is poor, being wider below than above: the base is flat, and there is no neck: the spout is nearly horizontal. Beside the usual handle, on each side of the spout we find a smaller handle, with flat round lower end. The clay is coarse and yellow, and the glaze dull brown-black. The edge of the lip is slightly dented, giving a saw-like appearance. The upper half of the body is divided vertically into seven metopes, narrowing at the top: round their upper and lower edges runs a row of small knobs, curving down in semicircles round the lower ends of the side handles. The front metope and the two side ones under the side handles are filled with the "finger pattern," and covered with a creamy wash, as are also the upper and lower line of knobs. The other four metopes are cream-coloured, bordered vertically with bands of dark brown, on which are rows of semicircles in white.

Horizontally these metopes are divided by four broad lines of dark-brown, connected by narrower diagonals of lighter brown, forming a zigzag. All these lines are dotted with white, and edged with rows of brown dots. The upper line of knobs round the neck has a line of white semicircles on its upper edge: and on the neck are traces of some design in white. Along the lower border of the lower line of knobs is a row of double festoons in white. Round the flat base runs a broad chalky white band. Height, 30 cm. Plate VI. *a*.

(8) The next two vases show the foot of No. 6 developed into a high pedestal, expanding below, and the small side handles of No. 7 have become of the same size as the back-handle, while the spout is nearly upright. Both are in fine light-red clay, with coarse black grains. In the first specimen round the neck is a low ridge, and the portion of the neck above it, as well as the handles, has a creamy wash. At the junction of neck and body is a collar of tooth-shaped knobs. Round the widest part of the body runs a series of three low ridges, edged above and

below by a line of white cable-pattern. The foot is creamy white. The rest is covered with dark black glaze, of which the part above the ridges is spotted with small white dots, and the lower part with three sets of three narrow white bands. Height, 50 cm. Fig. 8.

(9) In the second specimen, the chalky white of the neck covers only the upper half of the handles, and the row of teeth is replaced by a simple ridge. Round the widest part of the body runs a broad white band, edged on each side by two narrow bands. The upper half is covered with white dots, the lower is plain: just above the foot are three narrow white bands. Height, 35 cm. Fig. 9.



FIG. 8 (1 : 5½).



FIG. 9 (1 : 3).

The upper half of a similar vase was found, but of coarser make, with the neck ridge painted red.

B. a. Tall jars, usually in rather coarse ware, with flat base and low squat neck, expanding into a broad flattish lip, and a short round handle, extending from the shoulder to under the lip. *Cf.* the vase on the gem, *J. H. S.*, Vol. XVII., p. 334, Fig. 2.

(1) Fine yellow clay: shape very clumsy. The neck, after widening into a funnel-shaped orifice, rises at the edge into a vertical rim. The glaze is red-black

and dull in parts. Round the upper half of the shoulder are three narrow white lines, and round the base three similar lines, from which rise large spirals. Height, 24.5 cm. Fig. 10.

(2) Coarse red-brown clay, with black glaze. Round the neck a ridge, and round the body three sets each of three narrow white bands. Height, 30 cm. Fig. 11.

(3) Same type, without rim, in lumpy red clay, and very thin red glaze : splashes and dots in dull white. Height, 29 cm.

Many similar fragments turned up : one had the neck and upper half of handle covered with creamy wash : round the base of the neck was a ridge, and the black-glazed body was filled with white dots. Usually however the fragments were of very coarse technique.

B. β. The second variety has two handles, which compress the lip between them into an elliptical shape. A tall specimen from Kephala



FIG. 10 (1 : 4).



FIG. 11 (1 : 5).

in a sort of proto-Mycenaean ware, had a spout on the shoulder, thus forming the prototype of the tall early proto-Mycenaean *bügelkanne*, which occurred frequently on Kephala, and in Melos.

1 : A small coarse unpainted specimen, of the usual tall slender type. 12.5 cm.

2 : Same type ; fine yellow clay, and red-black glaze. Under the lip a slight ledge. Round the neck a white band, a second under the handles, and a third round the body : between the lower pair is a coarsely drawn double-axe in white, and traces of other designs. 34 cm. Fig. 12.

There were several similar vases, showing no visible design ; one very tall slender one, 43 cm. high, had broad ribbed handles, and the upper and lower fifths of the vase only were glazed, the rest being left with the natural clay surface. The foot bulged out below. This closely re-embled vases of Phylakopi. Another fragment had a rude vegetable design in white on the shoulder.

3. Low broad squat type, with disproportionately wide body on slight foot. Very fine technique of black glaze on the fine yellow clay. The lower half is covered with two narrow and two broad white bands: round the widest portion is a broad dull red band, and a similar one round the neck: between them is a complicated spiral design in white, the gaps below between the spiral and its stalk being filled in with cross-lines. 22 cm. Fig. 13.

C. A very common and characteristic shape, occurring also at Thera. From a flat base the vase expands to about three quarters of the whole height, when it contracts rapidly, forming a neckless "hole-mouthed" jar with two handles, usually vertical or nearly so. It also has a spout, and is frequently marked by deep horizontal grooves. It is chiefly represented here by frag-



FIG. 12 (1:4)



FIG. 13 (1:3)

ments, often showing a vertical system of decoration. With them cf. Fouqué, Santorin, Plate XL. 1, XLII. 1, 2.

(1) Comparatively slender type, in fine yellow clay and red black glaze. The flat lip projects horizontally, and the handles are ribbed. The upper half of the body is covered with rows of white dots. 11 cm. Fig. 14.

Many fragments of similar vases occurred.

D. The central idea of these vases seems to be that of a shallow bowl on a pedestal: but in some cases the bowl drains into the pedestal by holes, and in others the bowl is simply a funnel-shaped expansion of the hollow foot. With the first class we may compare a common proto-Mycenaean vase-type of Phylakopi.

(1) The bowl is merely an expansion of the hollow foot. Fine red clay, smoothed vertically : red-brown glaze. The stem is divided by narrow white lines into horizontal zones, between which are narrow red wavy bands, edged on each side by white dots. The base is hollow, and rises towards the outer edge. Fig. 15.

(2) The bowl drains into the hollow pedestal by three holes, as at Phylakopi. The clay is coarse and red, with white grains : the surface is very rough, and has been smoothed vertically with a broad stick. Coarse red-black glaze : round the upper part of the pedestal are two white lines : from the base rises up spirally a set of narrow parallels, in four pairs, alternately red and white. Inside the small remnant of the bowl six thin lines radiate spirally from each hole, the two inner lines being red and the rest white. 28 cm.

(3) A fragment, of a similar stand on a solid foot, was in black glaze. Below the rim was a row of white loops, inside each of which was a red cross with a white



FIG. 14 (*circa* 1 : 3).



FIG. 15 (*circa* 1 : 4)

dot in each angle. Below these was a white band, and round the pedestal are traces of white spirals. Plate VII. e.

(4) Whether this bowl belonged to a pedestal is doubtful : the broken boss in the centre of the under side seems too small for a large foot. The clay is fine and yellow, with black-brown glaze. The spirally fluted under-surface is covered with a creamy wash, and separated above and below by a ridge from the flat broad rim, on the black glaze of which above and below is a row of white returning spirals. The interior is covered with plain black glaze. Fig. 16. Diam., 33 cm.

(5) The fragment, Fig. 17, is probably a piece of the bowl of a similar vase of coarse red-brown clay, full of large grains, with a brick red glaze. From the centre

ridges radiate to the lip, bordered each by two white lines, and there are traces of other decorations. It clearly stood on a pedestal, with which it communicated by a central hole. On the lower surface the glaze only occurs in a band round the rim, and round the junction of the foot and the bowl. Its diameter must have been about two feet when whole.

E. A class of small jars, averaging 5-6 in., somewhat of the *ocnochoe* type, with flat base, and flat wide lip.

(1) Very fine yellow clay, and black glaze: cylindrical neck, and broad flat handle. Round junction of neck and body a white band, from which white lines descend to the base. 15 cm. Fig. 18.



FIG. 16 (*terra* 1 : 31).

A different shape, broader and flatter with angular shoulder and wide neck. It has a flat handle, and is of coarse brick clay with dull glaze: the marks of the wheel are very clearly visible. 10 cm.

(2) Another similar shape, but more slender and graceful, with round handle rising above the level of the lip, was found, with black glaze surface, 13 cm. Also several very small rudely shaped juglets of the same type, but usually unpainted or glazed, averaging 5-7 cm. high.

(3) Very thin sides of fine yellow clay, with black glaze, on which are irregular white dots. 11 cm. Fig. 19.

(4) A larger broken jar, of similar type, but with two handles reaching half way up the cylindrical neck, had two white bands round the neck, and three round the base, while round the body was a band of returning spirals. 25 cm.

5. An unpainted jar, glazed black, with two vertical and two horizontal handles being nearly a stamnos. 19 cm.



FIG. 17.



FIG. 18 (1 : 3).

In this connection we may note several fragments of broken vases of the same type.

6. Cylindrical neck, with a ridge round the junction of neck and body, as on Mycenaean metal vases. The glaze is black. Round the neck a white band, connected with another higher up by vertical lines. On the edge are large white dots. On the shoulder are the remains of some vegetable design, consisting seemingly of spiral branches, in the centre of each being a half-rossette of leaves with rounded ends. The centre of each rosette is filled with a red spot, and the interval between each



FIG. 19 (1 : 3).



FIG. 20 (1 : 2).

spiral and the dotted ridge above is filled by two small leaves. The whole is rather like some later palmette designs. Plate VII. *d* (developed).

(7) A small jar, with broad flat handle : on the shoulder are spiral branches (?) in white.

F. Small cups and bowls, forming by far the most numerous class. Most of the fragments found belong to such vases.

(1) Cups, based on a metallic original, some being handleless, others having broad flat handles, often furnished near the lip with a pellet, representing a metal rivet.

The most distinct variety is shown on Plate VII. *a* and *b*. These specimens average 4 cm. high, and are of exceptionally delicate ware, glazed inside and out. The decoration usually consists of oblique bands of various shades of colour, forming striking contrasts. In Plate VII. *a*, we have two oblique red bands, edged with white, and forming a cross, the arms of which are filled with large white dots; on each side of the cross are rosettes of white dots. In Fig. 20 the surface is unglazed, with the



FIG. 21 (1 : 2).



FIG. 22 (1 : 3).

exception of two broad oblique bands, decorated with white crosses, and a band inside the lip, and on the top of the handle; 4.6 cm. high. Many similar cups are simply glazed. Fig. 21 is of the same type, but double-handled and with concave sides.

(2) Another variety is shown in the cup, Fig. 23, which has a slight foot and broad flat handle, which in many specimens rises high above the lip, making the vase a refined type of the Trojan scoop. These vases average 5-7 cm. and are in fine ware, ornamented with bands and festoons; some are coarser, and have only broad



FIG. 23 (1 : 2)



FIG. 24.

glazed bands inside and outside the rim, whilst others have three little feet. Fig. 22 is fluted spirally.

The large fluted jar, Fig. 24, may be included here. It is glazed; on each fluting is a triple festoon in white, and at the junction of neck and body is a white band. The spout is banded in white, and white circles surround the handle-bases. Round the body are traces of white zones, below which are white wavy lines, disposed in parallel pairs round the body. Diameter, 28 cm.

(3) This is a class of straight-sided cups, with or without handles, the body being formed of several horizontal segments, so disposed that each one overlaps the one above it. They usually have a plain dull red surface.

(4) Another class of rather coarse ware consists of tall and slender cups, narrowing below and then expanding into a broad, flat, often concave, foot. They are usually decorated near the lip with one broad white band on the black glaze, which covers the inside, as well as the outside. Average height, 8-9 cm.

(5) There are many poor small cups in coarse yellow clay, with straight sides, the surface being the natural clay, with a broad band of glaze round the lip inside and outside. Average height, 5-6 cm.

(6) Small cups, narrowing gradually below, with broad flat horizontal lip. This type gets gradually shallower till it finally becomes a flat saucer; they are usually glazed, but several have only two broad semicircles of glaze, pointing downwards from the rim. The average height of the cups is 6.5 cm. downwards, and the diameter of the saucers 9-10 cm.



FIG. 25 (circa 1 : 4).



FIG. 26 (1 : 2).

G. The following do not come under any of the above headings.

(1) A curious jar of fine yellow clay, with thin dark glaze. It has a slight foot and two nearly vertical handles below the flat horizontal lip. Beneath each handle are three vertical -lits, arranged in a triangle. To it belongs a cup-like lid, concave above, with a conical boss in the centre, and two knobs on opposite edges to lift it by. This may be a sort of incense-burner, the holes being for ventilation. 13 cm. (*British School Annual*, VI, Fig. 14.)

(2) An equally strange article, of coarse red clay, glazed black. It consists of a shallow flat-lipped saucer on three legs: one side is pinched up to allow of the horizontal handle being attached. In the bottom of the saucer is a small dome-like receptacle, closed above, but opening beneath by a central hole, round which are three smaller holes. Diameter, 13 cm. This closely resembles the small "incense-burners" found at Phylakopi, many of which open below in an exactly similar

way. Some bore traces of something having been burnt inside them, others did not. The present object shows no fire-marks. (*B.S.A.* VI, Fig. 15).

(3) Fine yellow clay, with red glaze: flat surface, with bevelled edges. In centre a circular receptacle communicating by two channels with the edge. Below it is broken, but it may have stood on a pedestal. It almost exactly resembles many of the steatite "lamps" of Phylakopi, which must have come from Crete, and which were locally copied in various wares. But many of them had no traces of burning, while others as clearly showed signs of fire, where the wick in each side-channel had burnt the steatite. The material of the present specimen, and the absence of all traces of fire, forbid us calling it a lamp. Fig. 25.

Certain curious objects probably belong to the pedestals of vases of class D. Fig. 26 is 15 cm. long, and is perforated at the base. It is decorated with circular ridges painted white outside, and in the centre of each circle is a knob painted red. Round the base is a broad red band. Another is 11 cm. long, and at one end is a double row of spikes. Round the centre runs a row of white circles with red centres, alternating with single spikes. On each side of this is a red band between two white bands. Another shows traces of a vegetable design in white and black glaze.

The spout (Fig. 27.) may be noticed. Plate VII. *f*. is a curious object, like a modern candlestick with central erection, on which designs are painted in red and white.



FIG. 27.

The pottery of this fabric, found in the Dictæan Cave, was not very abundant. It occurred only in one part of the Upper Hall in the lowest stratum of deposit about the altar. The circumstances are stated in *B.S.A.*, VI, p. 98. These sherds seem to represent, for the most part, a local variety of the ware, characterised by the body glaze, outside and inside, varying in the firing from a bistrous purple to a brilliant brick red. The latter tint is the most common, but often on one side of a vase only. On this the ornament, in very simple geometric or stylised vegetable schemes, is applied in white. The added red pigments, characteristic of the Knossos and Kamares vases, hardly ever occurred. Very few shapes have to be recorded, and those the most suitable for containing food or drink offerings, *i.e.* bowls, large and small, with and without handles, and three types of thin-walled cup; (1) the straight-sided, flat-handled kind found at Knossos (*cf.* Plate VII. *a*, *b*); (2) a curved-sided variety, not so metallic in appearance, and generally ornamented with a band of spirals under the rim; and (3) a peculiar concave-sided form, similar to Fig. 21. *supra*, but devoid of foot or distinct base and of handles.

Parts of high stemmed "fruit-stand" vases (*v. supra*, p. 88) were also common, both in unvarnished red ware, plain or decorated in matt white, and in red varnished ware, with white decoration of stripes and sprays, and with lines of moulding about the base (*c.* for a specimen, *B.S.A.*, VI, Fig. 27, No. 8). Some fragments of large bowls also showed lines of moulding encircling the vase beneath the handles: the furrows of the moulding are generally outlined in white.

Though the metallic reminiscences of this simpler ware are not so obvious as at Knossos, it still shows like influence in the straight sides and flat handles of the cups, and in the survival of rivet heads at the spring of the handles on both cups and bowls. The elaborate "finger-work" of Knossos is absent, but a simple wavy moulding produced by a similar process in the wet clay, when stiff, appears on two sherds: these are covered with a creamy wash, on which the cherry red is applied in vertical stripes. The one peculiarity of the ordinary white decoration is a double-line cross, usually painted under the bottoms of the straight-sided cups.

The observations made by the previous editors as to the general affinity between certain of the Kamares forms and the Theraean hold good. Since the excavation of Phylakopi, however, the number of Melian parallels is become the greater, and direct evidence of intercourse between Melos and Crete has now been obtained. Many Kamares sherds were found with pottery of the "Theraean period" in the "Middle City" at Phylakopi, and much worked Melian obsidian occurred in all the prehistoric Knossian strata,



FIG. 28.

from the Neolithic up to the Mycenaean. As to fabric we can adduce no new parallels. Ware of similar type, characterised by the same white decoration, applied on a black body glaze, with a rarer use of super-added red pigments, has been found both at Tiryns and in the sixth shaft grave at Mycenae. It has also appeared at Kahun in the Fayum, and in Cyprus, though there with a difference. In all these cases, however, the specimens are very few, and might very well be of actual Cretan origin.

The singularity of this Cretan ware, when fully developed, among its Aegean kin, has been emphasised by the Knossos discoveries in one striking particular, namely its imitation of metal technique. The specimens at the disposal of Messrs. Myres and Mariani happened not to illustrate this feature nearly so strongly as our straight-sided cups, especially those with overlapping zones of clay, our long-footed and ring-moulded *schnabelkannen*, and our flat handles with survivals of rivet heads. Specimens of the eggshell variety of this ware, treated superficially to imitate the indentations and protuberances of hammered metal, had already been found at Phylakopi, and drawings made by Mr. D. T. Fyfe of two sherds are

appended, which are singularly instructive examples (Figs. 28, 29). They exactly resemble fragments of chased silver-plate in all but composition. Several similar fragments from Knossos have been noticed above (p. 81).

The point to which this imitation is pushed in the details of certain types of Cretan vases suggests that vessels of metal (most probably, to judge from the imitations, precious ductile metal) were a prominent product of the Cretan pre-Mycenaean civilisation; although up to now, no examples have actually been found in the island. Metal vases, precisely similar, are drawn, however, on the clay Knossian tablets, and the famous Vaphio goblets are almost identical in form with the common Kamares straight-sided cups. Closer analogies, if possible, are, however to be sought on the walls of the tomb of Reklmāra. It is the Kefti tributaries who bear the truest metal types of the plain Kamares cups; and we are not improbably also destined to find in Crete the more elaborate animal-headed forms of vase which appear in the same hands. In the Dictæan Cave parts of two animals were discovered, which appear to have belonged to vases of a *rhylon* type. The first, the head and shoulders of an ox, is figured in *B.S.A.*, VI., Fig. 33. It is in typical

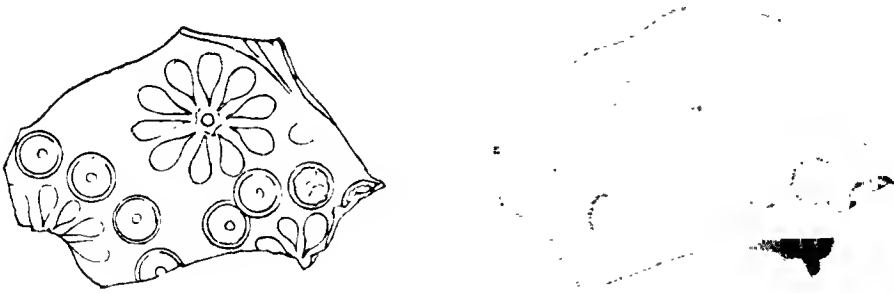


FIG. 29.

Mycenaean painted ware of the finest "Third Style." The second, in a duller and softer ware, also painted, represents the head of a wild goat with recurving horns, now broken off, poised erect on a swelling neck, precisely as the goat and ox heads stand on the Kefti vases. Both heads are artistically among the very best objects found in the Cave.

The close imitation of metal accounts obviously for so many peculiar details of ornament on the Kamares ware, both moulded and painted, that one is inclined to look to the same medium for the prototype of the principal singularity, the plastic "finger-work." In metallurgy, however, there is no known treatment of the surface even remotely similar, the incrustated effect produced sometimes by oxidation being, perhaps, nearer than any other. And since the "finger-work" surface is easily enough produced in clay, when in a fairly stiff state, either by the finger or a brush, it is best for the present to suppose this decoration an independent invention of Cretan ceramic artists.

The immediate ancestor of this Kamares ware is the hand-made and

polished black-brown pottery found in the yellow clay stratum on Kephala. No one, comparing the subjoined sherds of this fabric (Fig. 30) with the more primitive geometric designs on Kamares ware (see Fig. 31), can fail to agree that what is incised on the former is repeated in paint on the latter. The same predilection for zigzags and triangles appears in both wares, and the primitive sprays of two sherds in Fig. 30 need only the



FIG. 30.

inevitable development resultant on the substitution of paint for incision, to become the stiff sprays on the Dictaeon cups (*B.S.A.* VI, Fig. 27, Nos. 3, 4). Certain of the incised sherds show that Neolithic potters came to know how to apply a slip, which they polished highly (v. *B.S.A.*, VI, p. 86). The Kamares potter did not polish, but washed a black-brown glaze over the vase in order to produce not only a similar general effect to that long

familiar on the primitive ware, but also a surface which, unlike the earlier polished one, would take paint. The Neolithic potters filled in their incisions with white powdered gypsum, from which practice to the use of white paint is an easy step. One fragment of their ware found on Kephala and represented in Fig. 30 (left hand, third from top), has strong traces of red pigment, remaining both in the lines and the dots. If not due to accidental contact in the earth with some red substance (which is not very probable) this use of red on white supplies a further and signal illustration of a transitional style between the Neolithic and the Kamares methods.

Whether the Kamares were affected its successor, the Mycenaean, in Crete, is less certain. Up to the present very little pottery of the primitive "Mycenaean" types has been found in the island (v. *B.S.A.*, VI, p. 88), so little indeed, that what there is need not be of native fabric at all. The use of applied white to outline patterns, or disposed in rows of spots, which is noticed on Mycenaean sherds, found both at Knossos and in the Dictaeon Cave, might be



FIG. 31.

a survival of Kamares decoration, but in ware of the period it is by no means peculiar to Crete. In its most important characteristics of technique, its body glaze, its peculiarities of plastic decoration and imitations of metal work, the Kamares style does not survive in the Mycenaean. Nor—and this fact is of most significance,—do its painted patterns reappear. They had already become stylised, hard and degraded, whereas nothing so much characterises the Mycenaean patterns in Crete as their unconventionality and life. Their flower forms, for example, could not possibly be derived from the stiff Kamares forms. In short, Mycenaean ware in Crete, so far as known at present, seems to reflect the coming of an altogether new influence into Cretan art, which appears so suddenly as to suggest that it came from without, having developed elsewhere. The art that influence brought was too vigorous to be seriously affected by the art of the old civilisation it superseded. The Kamares patterns disappear until Mycenaean patterns have degraded into Geometric:

and the fact that faint revivals are seen again in the latest age may be due to nothing but the inevitable process of degradation set in anew. It does not necessarily imply any reappearance of a submerged fabric, preserved by the common people, while the rulers developed an alien and diverse culture; but at the same time it is quite possible that there was such a survival and revival in Crete.

D. G. HOGARTH.

F. B. WELCH.

MYCENAEAN TREE AND PILLAR CULT AND ITS MEDITERRANEAN RELATIONS.

WITH ILLUSTRATIONS FROM RECENT CRETAN FINDS.

[PLATE V.]

§ 1.—*Cretan Caves and Hypaethral Sanctuaries.*

AMONG the greater monuments or actual structural remains of the Mycenaean world hitherto made known, it is remarkable how little there is to be found having a clear and obvious relation to religious belief. The great wealth of many of the tombs, the rich contents of the pit-graves of Mycenae itself, the rock-cut chambers, the massive vaults of the bee-hive tombs, are all indeed so many evidences of a highly developed cult of departed Spirits. The pit-altar over grave IV. of the Akropolis area at Mycenae, and the somewhat similar erection found in the Court-yard of the Palace at Tiryns, take us a step further in this direction; but it still remains possible that the second, like the first, may have been dedicated to the cult of the ancestors of the household, and it supplies in itself no conclusive evidences of a connexion with any higher form of worship. In the great South-Western Court, and again in the Central Area of the Palace of Knossos, have now, however, been brought to light the foundations of what seem to have been two rectangular altars; and the special relation in which this building stood to the God of the Double Axe makes a dedication to the Cretan Zeus in this case extremely probable.

In Crete indeed we are on somewhat different ground. Throughout the island are a series of caves, containing votive and sacrificial deposits, going back from the borders of the historic period to Mycenaean and still more remote antiquity. The two greatest of these, on the heights of Ida and Dikta, are connected by immemorial tradition with the cult of the ancient indigenous divinity later described by the Greeks as the Cretan Zeus, whose special symbol was the double axe. The colossal rock-hewn altar at the mouth of the Idaean Cave was unquestionably devoted to the service of this God.¹ In the steatite libation-table found at the bottom of the votive stratum of the Diktaean Cave² we have an article of cult the special

¹ F. Halbherr and P. Orsi, *Antro di Zeus*
Ileo, p. 3 and Tav. xi.

² *J.H.S.* xvii. (1897), p. 350 *seqq.*

significance of which will be pointed out in a succeeding section.¹ The thorough exploration of this cave, now carried out by Mr. D. G. Hogarth,² on behalf of the British School at Athens, has conclusively proved that the old traditions of the birth-place and oracular shrine of the Cretan Zeus attached themselves to this spot. The blasting away of the fallen rocks that encumbered the upper part of the grotto has in fact revealed a rude sacrificial altar and temenos covered with a votive deposit some seven feet deep, while the character of the divinity worshipped was sufficiently indicated by the large number of votive double axes found both here and in the inner sanctuary below. These double axes, as we shall see, may have actually embodied the presence of the God himself. His actual image in anthropomorphic shape was not needed by the religion of that time. The great mass of votive figures found in the sacrificial deposits of these Cretan caves bear no distinctive attributes of divinity. They seem, for the most part at least, to be simply miniature representations of human votaries and their domestic animals, who thus, according to a widespread practice, placed themselves and their belongings under the special protection of the higher powers.

It is possible, as I have elsewhere suggested,³ that in a small building which occupies a most conspicuous position in the great prehistoric city of Goulas, in Crete, we have actually before us the remains of one of these Mycenaean shrines, originally containing a sacred tree. This is a small oblong building, about nine yards long by four wide, with walls originally breast high, consisting of two tiers of large roughly-squared blocks, the upper of which shows externally a projecting border, which recalls on a smaller scale the parapet of a great terrace wall that rises beyond it. The entrance to this low-walled enclosure on the small side to the north has mortised slabs on either side for the insertion of jambs, and must have consisted of a doorway higher than the walls themselves, and which may therefore have served some sacral purpose, the sanctity of the trilith or ritual doorway being widely prevalent in early religious cult, notably among the Phrygians.⁴ Here, as in the case of a Knossian cult-scene, to be described below, the doorway of the enclosure may have had either in it or before it a sacred pillar, while the tree itself stood within the hypaethral shrine, spreading its boughs over its low walls and lintel. In front of this entrance is a large rock-cut cistern, originally no doubt, like other cisterns of Goulas, roofed in with the aid of limestone beams. In this connexion it may be noticed that the ritual watering of sacred trees, either from a natural or artificial source, is a regular feature of this form of worship. In the Mycenaean cult this is illustrated by the Vapheio

¹ See below, p. 113 *seqq.*

² See *Annual of the British School at Athens*, 1900.

³ See my letter to the *Academy*, July 4, 1896, p. 18, and 'Goulas, the City of Zeus' (*Annual of the British School at Athens*, 1896). The recent French excavations on this site,

conducted by M. De Margne, have shown that a part of it at least was occupied by the inland Lato. But the fact remains incontestable that the overwhelming mass of existing remains belongs to the prehistoric period.

⁴ See below, p. 181.

gem, representing two lion-headed daemons, who have filled two high-spouted vases from the basin of a fountain, and raise them above what appears to be a nurseling palm-tree¹ (Fig. 1). It may be noted that this religious cultivation of the young palms—then no doubt being largely introduced on to Greek soil by the cosmopolitan taste of the Mycenaean rulers—finds a later parallel in the Assyrian representations, first explained by Dr. Tylor, of winged genii fertilising the adult palm with the male cones. The parallelism is very suggestive.



FIG. 1.—GEM FROM VAPHEIO TOMB. DALMONS WATERING NURSELING PALMS.

It is not necessary, indeed, to suppose that the sacred tree enclosed *ex hypothesi* in the Goulas shrine was a palm. A palm column, it is true, appears on a gem from this site² with two deer as supporters, in a scheme to be described below. But in Crete, as elsewhere in the Mycenaean world, there seems to have been a considerable variety of sacred trees. We recognise the pine and the cypress; and the abiding traditions of Knossos and Gortyna show how intimately the plane tree, which so often marks the presence of a spring, was bound up with the cult of the Cretan Zeus. The globular bunches of the tree, beneath which the Goddess sits on the signet from the Akropolis Treasure at Mycenae, have naturally suggested a vine. It will be seen from an interesting fragment from the site of Knossos that the fig must also be included among the sacred trees of the Mycenaean.

§ 2.—*Sacred Fig-Tree and Altar on a Pyxis from Knossos.*

The object in question (Fig. 2) is a portion of a cylindrical vase or pyxis of dark steatite, decorated with reliefs, found on the slope of the hill known as *Gypsades*, which rises opposite to that on which the Palace of Knossos stands.³ A remarkable feature of this fragment is that its lower margin is perforated by a rivet-hole, and shows other traces which indicate that the bottom of the cup was in a separate piece. The fact that at Palaeokastro, in Eastern Crete, an intaglio exhibiting dolphins and rocks in the same dark steatite, originally the bezel of a Mycenaean ring, was found covered with a thin plate of gold beaten into the design, suggests that in this case too the dull-coloured core may have been coated with the same brilliant material, and that the rivet holes may have partly served to attach the gold plate. It can be shown that the returning spiral designs of the oldest Mycenaean gold work are

¹ Apparently in a large pot: recalling the culture of nurseling palms at Bordighera, where they are largely cultivated for religious purposes, owing to a special privilege from the

Pope.

² See p. 154, Fig. 32.

³ It was obtained by me on the spot in 1894.

simply the translation into metal of the much more ancient steatite reliefs representing the same ornamentation. We may well believe that the steatite reliefs, like those of the fragment before us, gave birth in the same way to the figured designs in repoussé work, such as those that decorate the Vapheio vases, and that we here in fact see the intermediate stage of soft-stone carving, originally coated with a thin gold plate, which led up to more perfected art.

The design itself, so far as it is possible to study it in its fragmentary condition, presents so much naturalism and spirit that we may well believe that had the whole been preserved to us it would have afforded the nearest parallel to the marvellous gold cups from the Spartan tomb.

In the lowest zone of the composition, or, as we may call it, the foreground, appear parts of two male figures. The foremost of the two is in violent action, his right arm raised and his left thrown behind him. He is clad in the Mycenaean loin-clothing, and his feet were apparently swathed in the usual manner. Under his left shoulder fall long tresses of hair, recalling those that appear in the same position on the figures of the Vapheio cups and those of the Kefti tributaries on the tomb of Rekhmara. The prominent treatment of the sinews and muscles resembles that of the leaden figure from Kampos.¹

Behind this is a second male figure, who appears to be kneeling on one knee, and holding his right arm forwards, with his fingers and thumb together, as if in the act of sprinkling grain. Immediately behind him is a square block of isodomic masonry, with coping at top, which, from the two-horned object above it, is evidently an altar. It will be shown in the course of this study that this horned adjunct is a usual article of Mycenaean altar furniture.²

The altar, with its regular isodomic structure, recalls the limestone walls of some of the better constructed parts of the Palace at Knossos. It probably reproduces the original form of the rectangular altars in its Courts already referred to, of which only the bases now remain.

In striking contrast to the isodomic construction of the altar are the two low walls of the enclosure represented above. Here we see a series of irregular, mostly more or less diamond-shaped, blocks, which may be taken to represent the earlier roughly polygonal style of wall building. It is not possible, however, to be sure whether we have here a rustic survival of the older style, or whether the irregular character of the masonry is intended to indicate that it is of more ancient date than the altar outside. If, as I venture to believe, we have here to deal with the temenos of a sacred grove, the latter hypothesis may appear the more probable.

The tree within is certainly a fig-tree, the characteristic outline of the leaves being clearly defined. On a signet-ring, to be described below,³ also found on the site of Knossos, a group of sacred trees is seen within the temenos wall of a sanctuary which, from the trifid character of their foliage,

¹ Tsuntas, *Μυκηναί*, Pl. XI.

² See below, p. 135 *seqq.*

³ See p. 170.

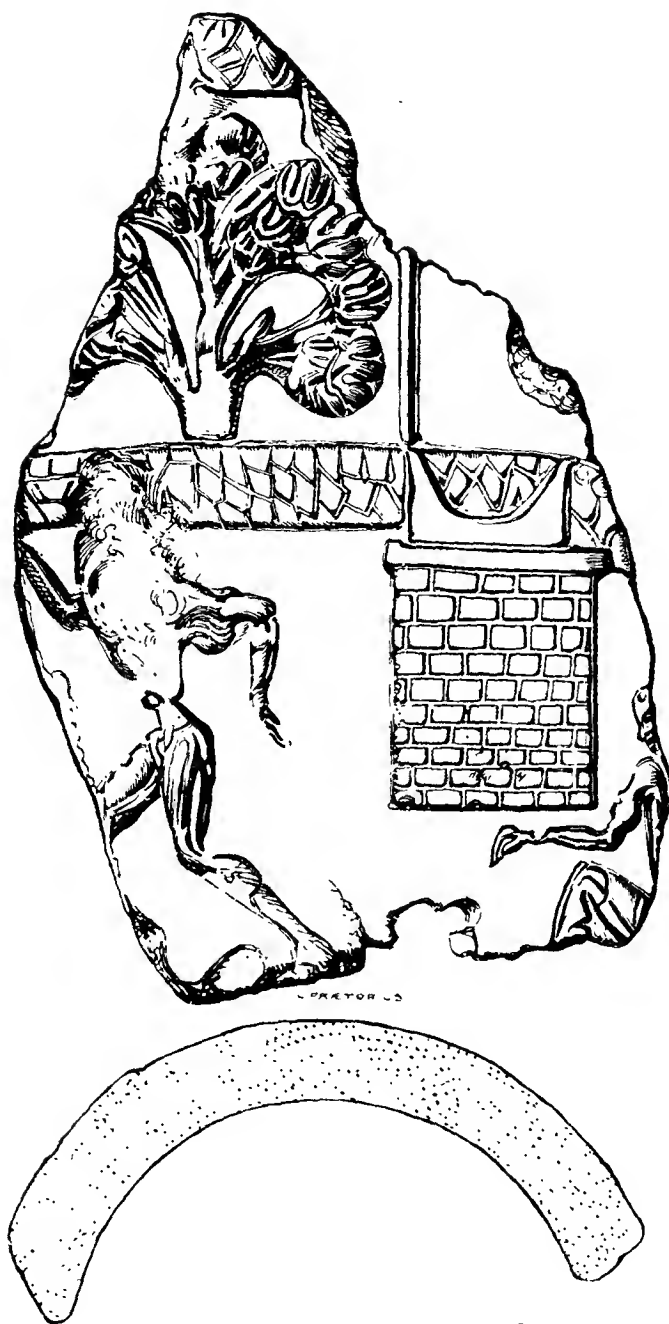


FIG. 2.—FRAGMENT OF SEATITE PYXIS—KNUSSOS.

may also with some probability be recognised as fig-trees. This analogy, coupled with the walled enclosure and the altar in front of it, leads to the conclusion that here too we see before us one of a grove of sacred trees within its sanctuary wall. It is probable that the gold plates in the shape of fig-leaves found in the Acropolis tomb at Mycenae¹—the thin foil of which proclaims their connexion with funereal cult—are also connected with the special sanctity of this tree.

The traditional sanctity of the fig-tree is well marked in the later cult of Greece. The Sacred Fig, the gift of Demeter, is well known, which stood on the Eleusinian Way beside the tomb of Phytalos, and gave his spirit an undying habitation.² Fig-leaves as religious types appear on the coins of Kameiros in Rhodes and of the Carian Idyma. In Laconia Dionysos was worshipped under the form of a fig-tree.³ A fig-tree is said to have sprung where Gaia sought to ward off the bolts of Zeus from her son Sykeas, and the prophylactic powers of these trees against lightning were well known.⁴ The sanctity of the fig-tree among the primitive elements of the Peloponnese, as well as in Mycenaean Crete, will be shown to have a special value in relation to the *Ficus Ruminalis* at Rome.⁵ Both on the score of fruitfulness, and from the character of the spots where it is found, the fig-tree may well have inspired a special veneration in primitive Aegean cult. In Crete it still grows wild where no other tree can fix its roots, at the mouth of the caves of indigenous divinities and in the rocky mountain clefts beside once sacred springs.

The post-like object to the right of the fig-tree in the steatite relief fragment remains enigmatical. It may well be some kind of sacred post or 'Ashera'—perhaps the sacral object which recurs with religious subjects on several Mycenaean gems⁶—an upright post impaling a triangle. The attitude of the man apparently engaged in sprinkling grain in front of the altar seems capable of a very probable explanation. When we recall the fact that the altar, with the same horn-like appendages, that surmounts the small gold shrines from the shaft-graves at Mycenae, is accompanied on either side by two figures of doves, and that the shrines themselves stand in close relation to small gold images of a naked Goddess with doves perched on her head and shoulders, it becomes highly probable that the kneeling man on the cup is engaged in sprinkling grain for sacred birds of the same kind. That the dove had become domesticated in Crete before the great days of Mycenae appears probable from the discovery which I made in an early house beneath the Palace at Knossos of a painted vase in the form of a dove, belonging to the prae-Mycenaean or Kamäres class of pottery.

¹ Schliemann, *Mycenae*, pp. 191, 192. Figs. 290, 291. These form part of a cruciform ornament. Schliemann did not notice that they were fig-leaves, but their outline is quite naturalistically drawn.

² Paus. i. 37.

³ *Atheniens*, iii. 14: Διώνυσος Συκίτης. Cf. Botticher, *Baumkultus*, p. 437.

⁴ See Botticher, *op. cit.* p. 440.

⁵ See below, p. 128 *seqq.*

⁶ See below, p. 154, Fig. 31.

§ 3.—*The Dove Cult of Primitive Greece.*

It must not be forgotten that birds of various kinds play an important part in this early cult of sacred trees and pillars. Among primitive races at the present day the spiritual being constantly descends on the tree or stone in the form of a bird, or passes from either of them to the votary himself in the same bird form, as the agent of his inspiration.

It is certain that much misconception as to the part played by sacred birds in ancient religion has been produced by the thoroughly unscientific habit of looking for the origin of the associated phenomena through the vista of later highly specialised cults, instead of from the standpoint of primitive ideas. Especially has this been the case with the sacred doves of Greece. Even the dove cult associated with Semiramis was, as has been well pointed out by M. Salomon Reinach,¹ in its origin un-Semitic. Nor in its early stage was there any special connexion with Aphroditê. In the *Odyssey* the dove bears nectar to Zeus.² His soothsaying wild doves at Dodona go back to the beginnings of Hellenic religion. The dove is equally connected with Dionê, who represented the consort of the 'Pelagian' Zeus long before she was assimilated with Aphroditê. It may be noted that where the sacred doves appear in their simplest European form they are generally associated with a sepulchral cult. It is in fact a favourite shape, in which the spirit of the departed haunts his last resting-place, and in accordance with this idea we see the heathen Lombards ornamenting their grave-posts with the effigy of a dove.³ Nor was it otherwise in prehistoric Cyprus. The figures of doves that adorn the rims of certain vases from the early Copper Age tombs of the island,⁴ accompanied with cone-like figures and small libation vases, are most probably connected with a sepulchral cult.

§ 4.—*The Association of Sacred Tree and Pillar.*

In succeeding sections attention will be called to a whole series of Mycenaean cult scenes in which the sacred tree is associated with the sacred pillar. This dual cult is indeed so widespread that it may be said to mark a definite early stage of religious evolution. In treating here of this primitive religious type the cult of trees and pillars, or rude stones, has been regarded as an identical form of worship.⁵ The group

¹ *Anthropologie*, vi. pp. 562, 563.

² *Od.* xii. 62, 63.

³ Paul Diac. *De Gestis Langobardorum*, v. 34.

⁴ Ohnefalsch-Richter, *Kypros, die Bibel und Homer*, p. 283, Figs. 181, 182, 186. Tombs of the early class in which these vases occur go back, if we may judge from the discovery in one of them of a cylinder of Sargon (3800 B.C.), as early as the fourth millennium before our era.

⁵ For the ideas underlying this widespread

primitive cult I need only refer to Tylor, *Primitive Culture*, ii. p. 160 *seqq.* and p. 215 *seqq.* The spirit is generally forced to enter the stone or pillar by charms and incantations, and sometimes also passes into the body of the priest or worshipper. The 'possession' itself of the material object is only in its nature temporary. When the spirit departs the "idol" remains only a sacred object. When a deity is thus brought down into a tree it blends with the tree life.

is indeed inseparable, and a special feature of the Mycenaean cult scenes with which we have to deal is the constant combination of the sacred tree with pillar or dolmen. The same religious idea—the possession of the material object by the *numen* of the divinity—is common to both. The two forms, moreover shade off into one another; the living tree, as will be seen, can be converted into a column or a tree-pillar, retaining the sanctity of the original. No doubt, as compared with the pillar-form, the living tree was in some way a more realistic impersonation of the godhead, as a depository of the divine life manifested by its fruits and foliage. In the whispering of its leaves and the melancholy sighing of the breeze was heard, as at Dodona, the actual voice of the divinity. The spiritual possession of the stone or pillar was more temporary in its nature, and the result of a special act of ritual invocation. But the presence of the tree or bush which afforded a more permanent manifestation of divine life may have been thought to facilitate the simultaneous presence of the divinity in the stock or stone, just as both of them co-operate towards the ‘possession’ of the votary himself.

In India, where worship of this primitive character is perhaps best illustrated at the present day, the collocation of tree and stone is equally frequent. The rough pyramidal pillars of the Bhuta Spirit, the dolmen shrines with their sacred stones, and many other rude “baetyls” of the same kind, such as those of the Horse God and the Village God among the Khonds, are commonly set up beneath holy trees. In the Druidical worship of the West, the tree divinity and the Menhir or stone pillar are associated in a very similar manner, and lingering traditions of their relationship are still traceable in modern folklore. To illustrate indeed this sympathetic conjunction of tree and pillar we have to go no further afield than the borders of Oxfordshire and Warwickshire. Beside the pre-historic stone fence of Rollright the elder tree still stands hard by the King Stone, about which it is told that when the flowery branch was cut on Midsummer Eve, the tree bled, the stone ‘moved its head.’¹

§ 5.—*The ‘Labyrinth’ and the Pillar Shrines of the God of the Double Axe.*

It will be shown in the course of this study that the cult objects of Mycenaean times almost exclusively consisted of sacred stones, pillars, and trees. It appears, however, that certain symbolic objects, like the double axe, also at times stood as the visible impersonation of the divinity. A valuable illustration of this aspect of primitive cult, which has hitherto escaped attention, is supplied by the subject of a painted Mycenaean vase (Fig. 3), now in the British Museum, found during the recent excavations at Old Salamis in Cyprus.² We see here the repeated delineation of a double axe

¹ See my paper on ‘The Rollright Stones and their Folklore,’ p. 20, *Folklore Journal*, 1895.

² It is worth noting in this connexion the

appearance of a Zeus Labramios in Cyprus. I. H. Hall, *Journ. American Oriental Soc.* 1883. Cited by O. Richter, *Kypros*, &c. p. 21.

apparently set in the ground between pairs of bulls, which also have double axes between their horns. But this representation contains a still more interesting feature. At the foot of the handle of axe, namely, appears in each case that distinctive piece of Mycenaean ritual furniture elsewhere described as 'the horns of consecration.' It occupies the same position in relation to the double axe as in other cases it does to the pillar or tree forms of the divinity. We have here therefore an indication that the double axe itself was an object of worship, and represented the material form or indwelling-place of the divinity, in the same way as his anconic image of stone or wood. It is a form of worship very similar to that described by Ammianus as still existing in his days among the Alans of the East Pontic coastlands, who simply fixed a naked sword into the ground with barbaric ritual, and worshipped it as the God of War.¹ A curious parallel to this is to be found in a Hittite relief at Pterium,² which represents a great sword with the blade stuck in the ground. The handle here has come to life, and portrays the divinity himself and his lion supporters.

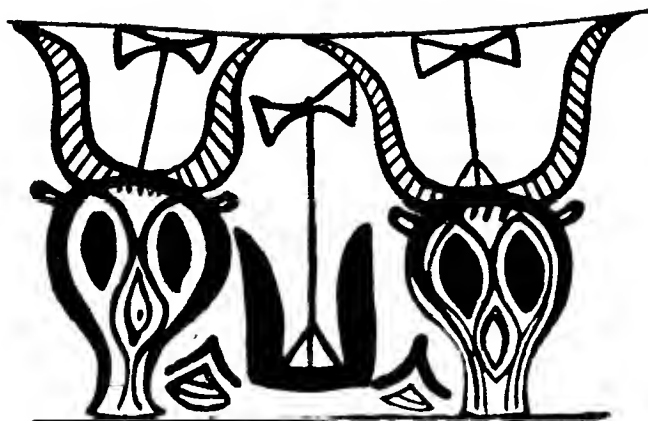


FIG. 3.—DOUBLE AXE WITH 'HORNS OF CONSECRATION' BETWEEN BULLS' HEADS WITH SIMILAR AXES. MYCENAEAN VASE. OLD SAIANIS

The idea of the double axe as the actual material shape of the divinity, the object into which his spiritual essence might enter as it did into his sacred pillar or tree, throws a new light on the scene represented on the large gold signet from the Akropolis treasure at Mycenae (Fig. 4). Here, above the group of the Goddess and her handmaidens, and beneath the conjoined figures of the sun and moon, is seen a double axe, which is surely

¹ Amm. Marc. xxxi. 2, 21. 'Nec templum apud eos visitur aut delubrum. . . sed gladius barbarico ritu humi figitur nudus eumque ut Martem regionum quas circumstant praesulem verecundius colunt.' Prof. Ernest Gardner also calls my attention to a

passage of the Schol. A on *Iliad* A 264; (Καιρός) πῆξας ἀκόνηιον ἐν τῇ μεσαιτάφῃ τῆς ἀγορᾶς θεὸν τοῦτο προσέταξεν ἀριθμεῖν.

² Perrot et Chipiez, *L'Art dans l'Antiquité*, t. iv. p. 642 and p. 647, Fig. 320.

something more than a mere symbol. It stands in a natural relation to the small figure of the warrior God to the left, and probably represents one of the cult forms under which he was worshipped. The small, apparently descending, image of the God himself may be compared with a similar armed figure on a ring from Knossos, to be described below, in which the cult form of the divinity is seen in the shape of an obelisk. The tree behind the Goddess on the signet-ring, the small stone cairn on which one of the attendants stands and the double axe probably reproduce for us the external aspect of the scene of worship, into which religious fancy has, here, also pictorially introduced the divine actors. The curious reduplication of the axe blades suggests indeed that it stands as an image of the conjunction of the divine pair—a solar and a lunar divinity. This primitive aspect of the cult, in which the double axe was actually regarded as a pair

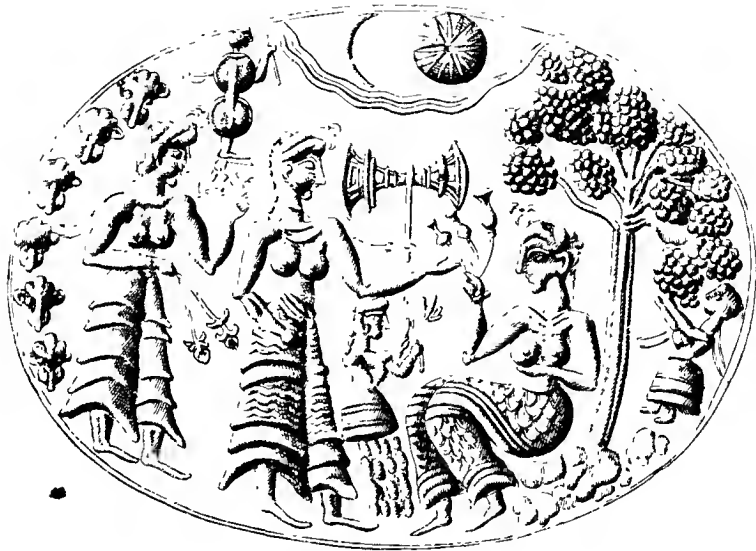


FIG. 1—GOLD SIGNET FROM AKROPOLIS TREASURE, MYCENAE ($\frac{1}{2}$).

of divinities, receives in fact a curious illustration from the human imagery of later Greek cult. On the reverse of the coins of Tenedos, as on so many Carian types, the old double axe form of the divinity is still preserved, while on the obverse side appears its anthropomorphic equivalent in the shape of a janiform head, which has been identified with Dionysos and Anahî.¹ It may be noted that in Tenedos Dionysos is the solar Sabazios of the Thracio-Phrygian cult.

With the evidence of this primitive cult of the weapon itself before our eyes it seems natural to interpret names of Carian sanctuaries like Labranda in the most literal sense as the place of the sacred *labrys*, which was the

¹ Head, *Historia Numorum* pp. 476, 477.

Lydian (or Carian) name for the Greek *πέλεκυς*, or double-edged axe.¹ On Carian coins indeed of quite late date the *labrys*, set up on its long pillar-like handle, with two dependent fillets, has much the appearance of a cult image.² The name itself reappears in variant forms, and notably connects itself with Labranda near Mylasa, which was a principal scene of the worship of the Carian Zeus. A traditional connexion between the Carian and old Cretan worship is found in the name Labrandos applied to one of the Curetes who was said to have migrated to the neighbourhood of Tralles,³ and whose associate, moreover, Panamôros preserves another form of the name of the Carian divinity.⁴

The appearance of the divine double axe on the vase between the two bulls finds a close parallel in the Mycenaean lentoid gem from the Heraeum,⁵ on which a double axe is seen immediately above a bull's head. The connexion of the God of the Double Axe with the animal is well brought out on the Anatolian side by the figure of Jupiter Dolichenus, a Commagenian variant of the Carian god, who stands, after the old Hittite manner, on the back of the bull. Once more we are taken back to Crete, and to the parallel associations of Zeus-Minos and the Minotaur. These comparisons, moreover, give an extraordinary interest to an identification already arrived at on philological grounds. It was first pointed out by Max Mayer⁶ that the Carian Labrandos or Labraundos in its variant forms is in fact the equivalent of the Cretan Labyrinthos. The Cretan Labyrinth is essentially 'the House of the Double Axe.'⁷

¹ Plutarch, *Quaest. Graec.* 45.

² See especially the reverse of a coin of Aphrodisias, struck under Augustus, *B. M. Cat. Caria*, &c., Pl. VII. 2. Zeus Labraundos is often represented in only partially anthropomorphised form.

³ *Et. Muyn.* s.v. *Εἰδωρος*. Cf. Roscher's *Lexikon*, Art. 'Kureten,' p. 1599.

⁴ *Πανδάριος* is the more usual form. See Kretschmer, *Einführung in d. Gesch. d. griech. Sprache*, p. 303, n. 2.

⁵ Schliemann, *Mycenae*, p. 362, Fig. 541; Furtwangler, *Antike Gemmen*, Pl. II. 42.

⁶ *Jahrbuch d. K. D. Inst.* vii. (1892), p. 191. He derives *Λαβύρινθος* from *Λαβύρινθος* (*Zeûs*), a possible adjectival form of *Λάβρυς*. A similar but somewhat variant view is put forth by Kretschmer (*Einführung*, p. 494), to whom it had occurred independently. He makes *Λαβύρινθος* a Cretan corruption of the Carian *Λαβρανδός*, or its alternative form *Λαβραυνδός*. Dr. W. Spiegelberg, indeed, has lately (*Orientalistische Literatur-Zeitung*, Dec. 1900, pp. 447-449), revived the view, suggested by Jablonsky, that the name *Λαβύρινθος* took its origin from the Egyptian building known to the Greeks by that name, the Mortuary Temple, namely of Amenemhat III, whose more lasting monu-

ment is the Fayum Province. The official form of Amenemhat's name *N-m-t-Re* was Grecised into *Λαβάρης* and Spiegelberg would derive *Λαβύρινθος* from this + the *-νθος* ending of place-names, as *Κόρ-νθος*. But the obvious objection to this is that this termination, which in related forms can be traced through a large Anatolian region as well as Greece, belongs to the pre-Hellenic element of the Aegean world, to the same element, in fact, to which *labrys* itself belongs. On the other hand it is quite natural to suppose that the Greeks having taken over the word *Λαβύρινθος* applied by the earlier race to the Cretan building, should by a kind of *folk-etymologic* transfer the term to the Temple of 'Labaris.'

⁷ Max Mayer and Kretschmer (*loc. cit.*) derive the names of the places *Λαβρανδα* and *Λαβύρινθος* from the names of the God, and thus indirectly from the *Λάβρυς*. But the numerous terminations of local Carian names in *-nda* *-ndos*, on the one side, and of pre-Hellenic sites in Greece in *-inthos* or *-ynthos*, make it probable that both the Labyrinth and Labranda may have taken their name directly from the sacred axe, meaning simply 'the place of the *labrys*.'

In the great prehistoric Palace at present partially excavated by me at Knossos I have ventured on many grounds to recognise the true original of the traditional Labyrinth. It is needless here to speak of its long corridors and succession of magazines with their blind endings, its tortuous passages, and maze of lesser chambers, of the harem scenes painted on its walls, and its huge fresco-paintings and reliefs of bulls, grappled perhaps by men, as on a gem impression from the same site, the Mycenaean prototype of Theseus and the



FIG. 5.—PILLAR OF THE DOUBLE AXES IN PALACE, KNOSSOS.

Minotaur. All this might give a local colour to the mythical scenes with which the building became associated. But there is direct evidence of even a more cogent nature. It was itself the 'House of the Double Axe,' and the Palace was at the same time a sanctuary. The chief corner stones and door-jambs, made of huge gypsum blocks, are incised with the double axe sign, implying consecration to the Cretan Zeus. More than this, in the centre of the

building are two small contiguous chambers, in the middle of each of which rises a square column, formed of a series of blocks, on every side of each of which in one case and on three sides of the other is engraved a double axe (Fig. 5). There can, I venture to think, be little doubt that these chambers are shrines, probably belonging to the oldest part of the building, and the pillars thus marked with the sign of the God are in fact his aniconic images. The double axe is thus combined with the sacred pillar.

This view is corroborated by the occurrence in a Mycenaean building excavated by Mr. Hogarth on the opposite hill of Gypsades¹ of a small room with a pillar of the same construction, on either side of which were more or less symmetrically arranged rows of clay cups turned upside down, such as are otherwise so abundantly associated with the votive deposits of the Cretan Cave sanctuaries. In this case the blocks forming the central pillar are not incised with the double axe symbol; but if the addition of any special religious attribute is now wanting, it may originally have been supplied by means of the painted coating of plaster so generally employed in Mycenaean Knossos.

These Cretan pillar shrines find an interesting parallel in two contiguous chambers excavated by the British School at Phylakopi,² which were also exceptionally provided with free-standing square pillars. The presence of a curious type of painted vessel of the earlier Aegean class, apparently used for the reception of libations, had already made it probable to the excavators that these columnar chambers should be regarded as shrines. In this case, as probably in the Palace at Knossos, this pillar shrine in its original form goes back to the pre-Mycenaean period. In the presence of the Cretan parallels the full value of the free-standing pillar here as a vehicle of divine presence must now be recognised. It will be shown from a variety of evidence that the most typical form of the Mycenaean sacred pillar is represented as actually performing a structural function, and is in fact a 'Pillar of the House.'

A useful commentary on these more or less domestic pillar shrines of the Mycenaeans is supplied by a vase fragment from a tomb at Enkomi (Old Salamis)³ in which female votaries are seen within a two-storeyed building, their hands raised in the act of adoration on either side of what appear to be square columns like those in the Knossian chambers (Fig. 6).

The recent exploration of the inner sanctuary of the Diktaean Cave has produced an interesting discovery which may be taken to illustrate the Mycenaean pillar worship in its most primitive and naturalistic form. In the lower vault of the Cave, and partly out of the waters of its subterranean pool, rises a forest of stalactite columns, stuck into the crevices of which Mr. Hogarth found hundreds of votive bronzes, and among them a quantity of double axes declaring the special dedication to the Cretan Zeus. In these votive objects, thrust into the crevices of the stalactite, we may, I venture to think, see something more than a convenient way of disposing of offerings. They clearly indicate

¹ See *Annual of the British School at Athens*, 1897-8, p. 15.

² *Annuaire of the British School at Athens*, 1900.

³ A. S. Murray, etc. *Excavations in Cyprus*, p. 73, Fig. 127.

that in this case the natural columns of this Cavern shrine were regarded as the baetylic forms of the divinity, just as the Cave itself is here his temple. It may be observed, moreover, in this connexion that some of the shorter stalagmitic formations of this 'Holy of Holies' are perfect representations of the omphalos type, and perhaps supply the true explanation of the origin of this form of sacred stone.

It will be shown in the succeeding section that the inscribed libation table found in the upper sanctuary of the same Cave is in a similar way associated with a baetylic form of the God as an artificial column or cone.

§ 6.—*The βαίτυλος and Baetylic Tables of Offering.*

There will be repeated occasion for observing the close correspondence of the Mycenaean and Semitic cult of sacred pillars. The best known

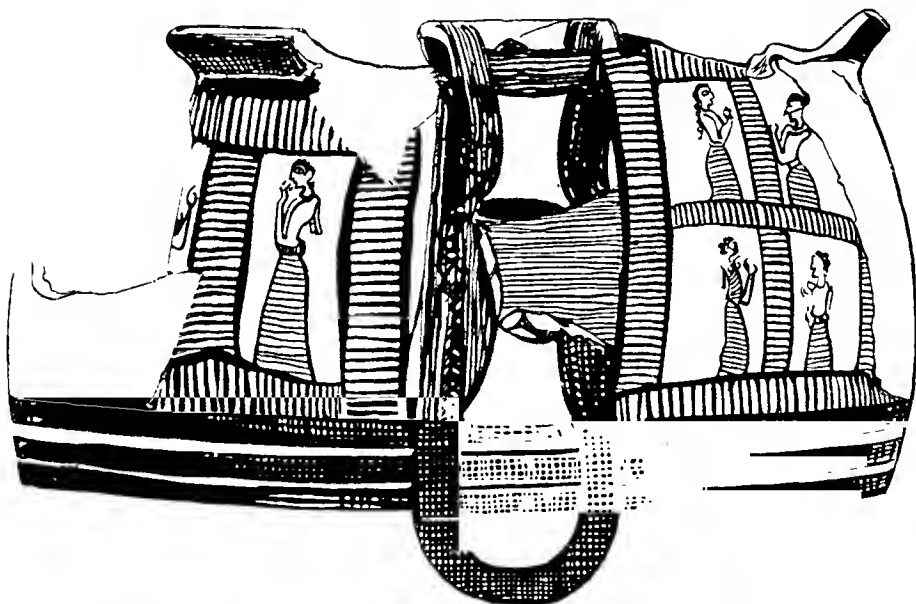


FIG. 6.—PILLAR SHRINES AND VOTARIES ON VASE FRAGMENT FROM OLD SALAMIS, CYPRUS.

instance of the kind is the pillar set up by Jacob, which was literally Bethel, the House of God. It has been suggested that these Semitic words, or some parallel form of the same—indicating the stone as the temporary place of indwelling for a divinity—supplied the Greeks with the term βαίτυλος or βαιτύλιον,¹ and applied in a special way to the stone which, according to the

¹ Lenormant, Art. 'Baetylia' in Daremberg and Saglio, *Dict. des Antiquités*, i. 642 *seqq.*; Baudissin, *Studien zur Semitischen Religion*, i. 232 *seqq.*; Dr. H. Lewy, *Die Semitischen*

Fremdwörter im Griechischen, pp. 255, 256, who prefers the derivation 'bet'eloth.' The word was derived by the ancient grammarians from the Cretan βαίτη = goat or goat-skin, in

Cretan legend, was swallowed by Kronos under the belief that it was his son. But this stone, as Lenormant has well pointed out, is in fact nothing else than the material form of the Cretan Zeus himself. The name was equally applied to the black cone representing the Sun God at Baalbec.¹

In the stalactite pillars of the inner sanctuary of the great Diktaean Cave with their votive double axes, the emblems of the Cretan Zeus, we have already ventured to recognise baetylic shapes of the God in a purely natural form. But, over and above this, there remains a remarkable piece of evidence which assuredly implies the existence of an artificial pillar image of the divinity, it may be even the actual 'baetylos' of remote tradition.

In the great upper hall of the Cave, near the small temenos more recently explored by the late Director of the British School, was found the fragment of a steatite table with cup-like receptacles for libations, and bearing upon it part of a prehistoric inscription, described by me in a previous publication.² The evidence of a triple libation was there compared with the old Arcadian rite, the offering to the Dead before the falls of Styx.³

Πρώτα μελικρήτω, μετέπειτα δὲ ἡδέϊ οἶνω,
Τὸ τρίτον αὔθ' ὕδατι.

The special appropriateness was pointed out of such a rite in the case of the Cave shrine of the infant Zeus, where, according to the legend, he had been fed by the Nymphs with mingled milk and honey.⁴ But there remains another feature of the Libation Table which brings it into still closer relation with the primitive baetylic image of the God.

The slab of offering, in this case, with its triple receptacle, is in fact a part of a table. Its angles on the under side show projections which fitted on to four legs. But over and above these corner supports, which for a table of such dimensions would have been amply sufficient, the under surface of the offertory slab also displays a larger circular prominence, which shows that it was set over a small central column. The analysis of the original cult object now becomes clear. The Table of Offerings itself is only a secondary feature. The slab with the cups for libation was simply placed over the pillar,—here, perhaps, as shown in the reconstruction of the whole in Fig. 7, of slightly conical outline,—which in fact represents the aniconic image of the divinity, the actual *baetylos* of Zeus.

The corner posts of the libation table were only added to afford additional security; they give to the whole the appearance of a small shrine resembling the Mycenaean pillar shrines to be described in succeeding

special allusion to the stone substitute of Zeus swallowed by Kronos. This view has been revived by Svoronos, *Zeitschrift für Numismatik*, 1888, p. 222, and is preferred by Maximilian Mayer, Art. 'Kronos,' in Roscher's *Lexikon*, ii. p. 1,524. But it is not explained how the word came to be applied (according to the *Etymol. M.*) to the stone of

Heliopolis.

¹ *Etymol. Mag.* s. v.

² 'Further Discoveries of Cretan and Aegean Script,' *J.H.S.* xvii. (1897) p. 350 *seqq.*

³ *Od.* x. 519, 520.

⁴ Cf. *Diod.* v. 20.

sections.¹ In a sense, too, the table here has a real analogy with these, the top slab of such baetylic shrines being used either as a resting place for votive objects or as the support of a Mycenaean altar. It is to be noted, however, that in both cases the centre of the whole religious construction is the aniconic image within. The term 'altar,' which has been so usually applied to these Mycenaean structures, is quite inadequate, though, as we shall see, these baetylic tables gave rise in later days, when the aniconic image itself had been superseded, to a Cretan form of altar, and to certain types of tripod.

In the most primitive form of this pillar cult the offerings are simply

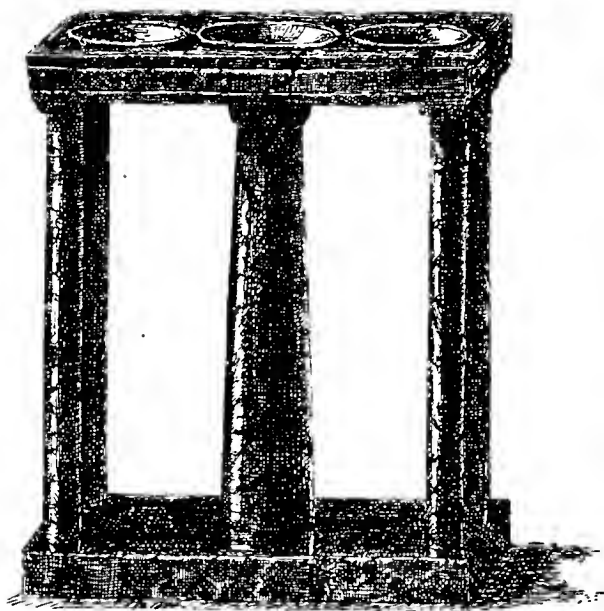


FIG. 7.—BAETYLIC TABLE OF OFFERING FROM THE DIKTAEAN CAVE, RESTORED.

placed on the holy stone.² In other cases a basket or some temporary receptacle is laid on top of it, containing the offering. Thus, for example, in a Greco-Roman relief,³ the shovel-shaped basket of Bacchus—the Liknos or

¹ The analogy between these and the Diktaean Libation Table as reconstructed has been noted by Dr. P. Wolters (*Jahrbuch d. k. d. Inst.* 1900, pp. 147, 148); but the explanation given by him, that both the Diktaean structure and those represented on the signets are 'altars,' falls, as I venture to believe, short of the truth. The view again and again put forward in the course of the present study, is that they are in reality small shrines, the central columnar support of which

is the aniconic image of the divinity. They are only 'altars' in a secondary sense.

² I have actually seen egg offerings thus placed on the top of a sacred stone in Finnish Lapland. The stone itself was so high that for the convenience of the votaries a primitive form of ladder in the shape of a notched pine trunk was laid against it.

³ *Mon. Inediti*, ii. Pl. 37; Botticher, *Baumkultus*, Pl. 56.

Vannus—laden with grapes and other fruit, is placed on the coniform summit of a divine pillar, which, as is so often the case, is associated with a holy tree and sacral arch. It is interesting to note that the most typical form of the Hittite altars represents the superposition of a receptacle of the same shape as this offertory basket on what must certainly be recognised as a baetylic cone (Fig. 8 *a*). In other cases the same conical base supports a small flat slab with offerings upon it (Fig. 8 *b*), and at times again it is simply surmounted by a rayed disk indicative of the divinity of the stone (Fig. 8 *c*).¹

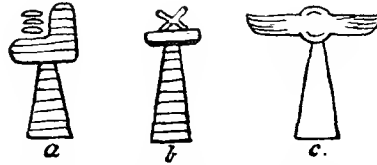


FIG. 8.—BAETYLIC CONES AND OFFERING SLABS ON HITTITE SEALS.



FIG. 9.—SMALL BAETYLIC ALTAR FROM CYRENAICA.

The cup-shaped receptacles of the Diktaean slab represent, in a more developed form, the cup-like hollows worked for the reception of offerings in the capstones of some of our Dolmens, which themselves served as the shrines of departed human spirits.

A very interesting parallel to the baetylic libation table of the Diktaean Cave is supplied from a quarter which has perhaps a special significance in connexion with the primitive monuments of Cretan religion. The Libyan God Zeus Ammon was represented in his oracular shrine of the Oasis as a kind of cone or omphalos, a survival of aniconic worship which recalls the obelisk of his Egyptian impersonation, Amen-Ra. But a limestone object (Fig. 9) obtained by Dr. Dennis in the Cyrenaica² reproduces the essential features of the pillar table of the Diktaean Cave. The central column is here of conical form, which on Libyan soil we should naturally connect with the native Zeus. The table above has the four subsidiary legs of the Cretan type, while its upper surface is surmounted by a kind of receptacle open

¹ Figs. 8 *a*, and 8 *b*, Tarsus seal, haematite, *Arch. Inst. Journ.* 1887, p. 348 (Ashmolean Museum); cf. cylindrical seal from Caesarea in Cappadocia, Dresden Museum (L. Messerschmidt, *Orientalistische Literatur-Zeitung*, 1900, p. 442, Fig. 1). Fig. 8 *c*, seal from Yuzgat, S.E. of Boghaz Kioi, Budge, *Proc. Soc. Bibl. Arch.* ix. Nov. 1886,

(in the British Museum). Cf. another seal from Yuzgat (T. Tyler, *Internat. Congr. of Orientalists*, 1892, p. 267, Fig. 13), where the winged disk surmounts a somewhat more primitive cone. On several examples the God himself is seen in anthropomorphic form before his baetylic cone and altar slab.

² Now in the British Museum. Mr. Dennis

on one side, and in this respect resembling the basket or Vannus placed on the sacred pillar already described.

It is possible that the cult object from the Cyrenaica is of considerably later date than that from the Diktaean Cave, but there can be no doubt as to the parallelism presented by its constituent parts. Here, too, we have, —moulded, it is true, into a single piece,—the central object of worship, in this case a sacred cone, with the table placed above it and the receptacle for offerings on the upper surface.

Two interesting pieces of evidence seem to show that this baetylic table formed a special feature in the indigenous Cretan cult, and even survived to Roman times. On a Mycenaean lentoid gem found in Crete, and presenting in a variant form the Lions' Gate type,¹ the sacred object on which the forefeet of the animals rest is neither the columnar image nor the usual Mycenaean altar with incurving sides, but an object consisting of a short central column, with a slab above it, further supported by side legs (Fig. 10). Here once more we recognise the essential features of the offertory table placed above the sacred pillar.

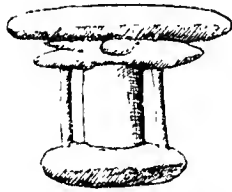


FIG. 10.—BAETYLIC TABLE USED AS A BASE FOR SACRED LIONS ON CRETAN GEM.

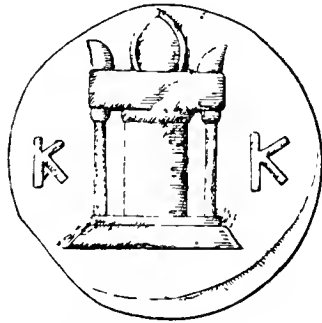


FIG. 11.—BAETYLIC ALTAR ON COIN OF CRETAN COMMUNITY.

In a much later shape, and with the original idea of the pillar idol merged in the sanctity of the whole block as a vehicle of offering, we find the same religious element surviving in a form of altar which occurs on certain coins of the Cretan community² as a badge of their common worship. On these coins (Fig. 11), struck under the Roman dominion, and bearing in an abbreviated form the legend **KOINON KPHTΩN**, we still clearly distinguish the central baetylic column and the offertory slab above, with the legs at its angles. The table itself is here surmounted by a central akroterion, and lateral excrescences which represent here, as elsewhere, the tradition of the typical cult object of Mycenaean times, 'the horns of consecration.'

obtained it when Consul at Bengazi, but no account exists of the exact place or circumstances of its discovery.

¹ More fully described below. See p. 161.

² Syroinos, *Numismatique de la Crète ancienne*, Pl. XXXV. 36.

Some impressed glass plaques recently found by Dr. Tsuntas in tombs of the Lower Town at Mycenae¹ supply three different examples of the ancient pillar cult in association with the strange lion-headed daemons of Mycenaean religion.² Elsewhere³ we have seen the same monsters in the ritual act of watering the nurseling palms. In the present case they are engaged in pouring libations over sacred stones and pillars. In Fig. 12,⁴ we see them holding the usual prochous vases, or beaked ewers, over what appears to be a cairn formed of natural stones, with a larger block on the top. This primitive form of stone worship recalls the setting up of stones from the bed of the Jordan by Jacob at Gilgal. It also receives a possible illustration in the stone heap on which a small figure stands in the scene presented by the great signet from Mycenae. In Fig. 13⁵ the same daemons are similarly engaged on either side of square pillars, which in form recall those with the incised double axes in the Palace of Knossos. The third example (Fig. 14)⁶ is of a somewhat different kind, and supplies a most interesting analogy to the 'baetylic table' described above.

Here the ritual libation is poured into what appears to be a kind of bowl,⁷ resting on a column of the Mycenaean architectural type, decreasing in



FIG. 12.—IMPRESSED GLASS PLAQUE FROM MYCENAE: DAEMONS POURING LIBATIONS ON SACRED CAIRN.

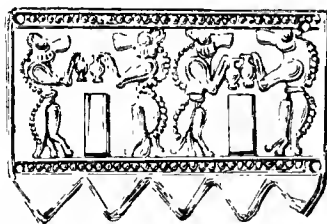


FIG. 13.—IMPRESSED GLASS PLAQUE FROM MYCENAE: DAEMONS POURING LIBATIONS ON SACRED PILLAR.



FIG. 14.—IMPRESSED GLASS PLAQUE FROM MYCENAE: DAEMONS POURING LIBATIONS ON A BAETYLIC TRIPOD-LEVÉS.

diameter towards its base. The bowl has two further supports on either side, answering to the legs of the offertory slab in the types above described. It

¹ Thanks to the kindness of Dr. Tsuntas I am able to reproduce these objects from drawings made by M. Gilliéron.

² See below, p. 168 *seqq.*

³ See Fig. 1, p. 191.

⁴ From a dromos tomb, with rock-cut square chamber, some distance north of the Acropolis.

⁵ Found in a plundered tholos tomb west of

the ridge leading from the Acropolis to Charvati.

⁶ Found in the same tomb as the preceding.

⁷ Dr. Tsuntas interprets this feature in the same manner. It might be also regarded as a capital of the column, but this would not explain the side supports. It is obviously a receptacle.

is possible that in this case there were only three legs, and that what we see before us is in fact a tripod with a central stem. This religious type again supplies the prototype of a class of tripods that survived to later times, where it also assumes an anthropomorphic form. The interior baetylic pillar indeed could hardly be thus treated, and the anthropomorphic element was transferred to the outer supports. A well known example of this kind is supplied by the Oxford tripod,¹ in which the basin, in addition to its central stem, is supported by three figures of Goddesses standing on the backs of lions. In a zoomorphic form the same underlying idea is illustrated by the three serpents of bronze, which formed the central prop of the golden tripod dedicated to the Delphian God out of the spoils of the battle of Plataea.²

§ 7.—*Zeus Kappôtas and the Meteoric Element in Baetylic Stones.*

The sanctity of baetylic stones and pillars is due to a variety of causes. It may be connected with some particular manifestation supposed to be of a spiritual nature—to the interpretation of a sign, or of a dream, as in the case of Jacob's pillar. Artificial pillars may owe their indwelling spiritual being to the holiness of the spot where they are set up, to religious symbols like the double axe carved on their surface, or to some special rite of consecration, of which, in Mycenaean religion, the two-horned cult object set before them is often the external symbol. Wooden columns, as we shall see, often take over their sanctity from the sacred tree out of which they are hewn.

There is also a good deal of evidence to show that certain natural blocks derived their baetylic qualities from the fact that they were of meteoric origin. According to Sanchoniathon³ 'Baetylos' is 'the son of Ouranos,' in other words sky-fallen. The phenomena associated with aerolites seem indeed to a certain extent to have attached themselves to the whole class of sacred stones. The early cults of the Greek world supply a good illustration of this class of ideas in the 'rude stone,' or *ἀργὸς λίθος*, that stood near Gythion in Laconia, and was known as Zeus Kappôtas—in other words the Zeus 'fallen down' from heaven.⁴ Allied to this are the *keraunia* or thunderstones, which, as the 'bolts of heaven,' were naturally recognised in the stone axes of an earlier age.⁵ A stone found near Mantinea bears an archaic inscription,⁶ which shows that

¹ See Prof. P. Gardner, *J.H.S.* xvi. (1896) Pl. XII. and p. 275 *seqq.*, where various classical parallels to this type of tripod are given.

² Herodotus (ix. 81) speaks of the tripod as standing over the three-headed serpent.

³ P. 30, Ed. Orelli.

⁴ See Sam Wide, *Lakonische Culte*, p. 21. 'Zeus Kappotas is der vom Himmel gefallene ἀργὸς λίθος καππώτας = κατα-πώτ-ας aus der Wurzel πετ-, πώτ-, vgl. πώτ-ά-ομαί.' Sam Wide saw in it rather a 'thunder-stone' than a meteorite. But the two ideas can hardly

be kept distinct.

⁵ Pliny, *II. N.* xxxvii. 9. Sotacus et alia duo genera fecit cerauniae, nigrae rubentisque, ac similes eas esse securibus; uis quae nigrae sunt et rotundae urbes expugnari et classes easque betulos vocari: quae vero longae sunt ceraumas.' *Betuli* are βαίτυλοι. On stone axes or celts regarded as thunderbolts, cf. J. Evans, *Ancient Stone Implements* (2nd ed.), p. 62 *seqq.*

⁶ Διὸς κεραυνῶ, Cauer, *Del.* (2nd Ed.) 447, (*I. G. A.* 191) S. Wide, *loc. cit.*, refers to this.

Zeus himself could be personified as such a stone. The rude stone images of the Charites at Orchomenos were sky-fallen; and a kindred form of the belief is found in the case of the still half aniconic image of 'the Diana of the Ephesians,' 'that fell down from Jupiter.' It is certain that the religious effect of the descent of a meteorite must have been very great in primitive societies,¹ and may indeed be regarded as the actual origin of certain local cults. But the idea of rude stones as the indwelling place of divinities or spirits was far too universal to be traced to this single source. The meteoric element must rather be regarded as a contributory influence, whence certain features in the beliefs regarding baetylic stones were derived. The idea of their flying through the air or falling from heaven, and their supposed power of burning with inner fire and shining in the night-time, were probably suggested by the phenomena associated with meteoric stones.

§ 8.—*Sepulchral Stelae as Baetylic Habitations of Departed Spirits.*

The stage in aniconic worship in which the pillar is of a purely artificial kind and the stone is, as it were, offered to a spiritual being as a place of habitation, marks an advance on the more primitive idea of a holy stone as one that has in some way manifested itself as being in spiritual possession. Yet the rites by which the medicine men of primitive races the world over are able to shut up Gods or Spirits in a material object, show how easily the idea of attracting or compelling such spiritual occupation must have arisen. A proof of this is found in the ideas attaching to the rude stone monuments placed over graves. These have not merely a memorial significance, but are actually a place of indwelling for the ghosts of the occupant of the tomb or his followers and slaves. It is before the dead in his stony form that due offerings of food and drink are placed; and when the monument takes a human shape, such as in a grosser form is assumed by the Kammennaye Babe that rise above the Kurgans of the Russian Steppes, or in a more artistic guise is seen in the funereal reliefs of Sparta, the deceased himself is often represented holding in his hands the cup for libations. The stelae of the graves at Mycenae must themselves be regarded as baetylic forms of the departed spirits of members of the royal house; and in the reliefs upon them exhibiting scenes of war and the chase we may recognise a compromise between the idea of supplying a spirit with an aniconic habitation, and that of pictorially delineating it in human form, of which we shall see numerous illustrations in Mycenaean cult scenes.

§ 9.—*The Tomb of Zeus.*

The two conceptions of the pillar image of divinity and of the tombstone as the dwelling place of a departed spirit meet in the idea of a mortal God.

¹ See Prof. H. A. Miers, 'The Fall of Meteorites in Ancient and Modern Times,' *Science Progress*, vol. vii. 1898.

In some respects later traditions of this class may be due to the mere attempt to explain the presence of an aniconic image of divinity in days when anthropomorphic forms had triumphed. But the very ancient religious elements with which traditions of this class are often bound up point to a time when the God himself could be regarded as having run an earthly course, and passed like an ordinary mortal through the gates of death.

We are tempted to believe that some of the small cellular shrines, illustrated by the signet rings of the Mycenaeans, were themselves derived from analogous forms of a primitive sepulchral architecture such as we find in the megalithic dolmen chamber of Mycenae itself, and the analogous structure belonging to the prae-Mycenaean or 'Amorgian' period of Aegean culture lately excavated at Chalandrianê in Syra.¹

The survival of such sepulchral traditions in connexion with divinities is very widespread on Greek, Syrian and Anatolian ground. The tomb of Adonis was placed within the temple-court of Byblos. In that of Paphos the grave of Aphroditê was pointed out as well as her sacred cone,² and with it was the burial-place of her chosen priest, the hero Kmyras,³ a favourite or double of Apollo, otherwise akin to the Cilician Sandon. The omphalos of Apollo at Delphi became known as 'the tomb of Dionysos'⁴—who, under his earlier Thracian form of Sabazios, was himself a Sun-God—and was even said to bear an inscription parodied from that of the Cretan Zeus.⁵ At other times it was the Pythôn's tomb.

This solar aspect of Dionysos gives a special value to the fact that at Argos the 'tomb of Ariadnê' was shown in the sanctuary of the Cretan Dionysos.⁶ In the sacred grove of Aphroditê Ariadnê at Amathus in Cyprus was also shown her tomb.⁷

At Amyklæ, where, as we now know from Tsuntas's excavations, the local cult goes back to Mycenaean antiquity,⁸ the colossal image of Apollo, which even in classical times had only partially lost its original aniconic form, stood on its altar seat above the grave of his favourite Hyakinthos. But Hyakinthos himself simply represents the local God of Amyklæ in a reduplicated form, and the Laconian colonists, who transferred his tomb and cult to Tarentine soil, regarded Apollo and Hyakinthos as one and the same divinity.⁹ In the days when the cult images of the Gods had taken human forms the aniconic idol ceased to be generally intelligible to the worshippers, and its occasional survival side by side with the anthropomorphic impersonation of the divinity led to a revival of the sepulchral tradition in another form. The sacred cone was supposed to mark the burial place of some

¹ Tsuntas, 'Εφ. 'Αρχ. 1899, Pl. VII.

² Clem. Rom. *Recogn.* l. 24; Enmann, *Kypros und der Ursprung des Aphroditékultus*, p. 34.

³ Clem. Alex. *Protr.* p. 40; see Enmann, *op. cit.* p. 33 and p. 27 seqq.

⁴ Tatian, *adv. Græc.* 8, 25. 'Ο δὲ ὀμφαλὸς τάφος ἐστὶ Διονύσου.

⁵ Philoch. fr. 22 in Malala, *ἔστιν ἰδεῖν τὴν ταφὴν αὐτοῦ ἐν Δελφοῖς παρὰ τὸν Απόλλωνα τὸν*

χρυσῶν. βόθρον δέ τι εἶναι ὑπονοεῖται ἡ σορός, ἐν ᾧ γράφεται· Ἐνθάδε κεῖται θανὼν Διόνυσος ὁ ἐκ Σεμέλης.

⁶ Paus. ii. 23, 7.

⁷ Plutarch, *Thebes*, 20.

⁸ 'Ἐκ τοῦ Ἀμυκλαίου. [Ἐφημ. Ἀρχαιολ. 1892, p. 1 seqq.]

⁹ Cf. Polybios, l. viii. c. 30, 2.

associated hero or mythical being, in reality simply representing a dual type of the God himself.

But the conception of the mortal God and the cult of his sepulchral monument is most familiar in the abiding traditions of the Cretan Zeus. The 'tomb of Zeus' was shown in Crete down to at least the fourth century of our era, and it was indeed the preservation of this piece of primitive religion, so foreign to later notions, that gained for the Cretans the distinguishing epithet applied to them by Kailimachos¹ and St. Paul. Possibly more than one locality claimed to possess the sepulchre, as the records preserved of it sometimes seem to couple it with the Cave of Zeus on Mount Ida, sometimes with Knossos. Lactantius places it at Knossos, and adds that it bore the inscription in early Greek characters, Zeus, son of Kronos²; but according to one version, which clearly fits on to the prae-Hellenic tradition of the island, the original name on the tomb was that of Minós³. According to one legend Pythagoras was said to have written on the tomb:

ᾧ Ὀδε θανῶν κείται Ζᾶν ὃν Δία κικλήσκουσιν.⁴

Lucian speaks of a tomb and stele⁵ and the continued veneration of the monument is attested by Christian writers down to Julius Firmicus,⁶ who wrote in the first half of the fourth century. After this there is a break in the written records till the eleventh century, when Michael Psellos speaks of the legend as still living, and relates that the Cretans show a cairn or heap of stones above the grave of Zeus.⁷ This might be taken to show that the older monument was then a heap of ruins. It is certain that later Cretan tradition has persistently connected the tomb of Zeus with Mount Juktas which rises as the most prominent height on the land side above the site of Knossos.⁸ Personal experiences obtained during two recent explorations of this peak go far to confirm this tradition. All that is not precipitous of the highest point of the ridge of Juktas is enclosed by a 'Cyclopean' wall of

¹ *Hymn* i. :—

Κρήτες αἰὲ ψεύσται, καὶ γὰρ τάφον, ᾧ ἄνα, σείο
Κρήτες ἐπεκτῆραντο· σὺ δ' οὐ θάβεις, ἐσσι γὰρ αἰεῖ.

² *De Falsa Religione*, lib. i. c. 11. 'Sepulchrum eins (sc. Jovis) est in oppido Gnoso. . . inque sepulchro inscriptum antiquis litteris Graecis ὁ Ζεὺς τοῦ Κρόνου.'

³ Schol. in Callimachum. *Hymn* i. According to this version the original description was Μίνως τοῦ Διὸς τάφος—then the name of Minós was omitted. This version may, of course, be set down to Euhemerism, but it seems to record a true religious process by which the cult of Minós passed into that of Zeus. That this explanation should have obtained currency is another indication that a tomb of Zeus was shown at or near Knossos.

⁴ Porphyry. *c. Pyth.* § 17. Cf. Chrysostom

in *Ep. Pauli ad Tit.* 3. Hoeck, *Crete*, iii. p. 36. The passages relating to the tomb of Zeus are collected in Meursius, *Crete*, p. 80.

⁵ *Jupit. Traged.* 45: τάφον πινὰ ἐκεῖθι δέικνυσθαι καὶ στήλην ἐφεστάναι. Cf., too, *De Sacrificiis*, 13.

⁶ *De Errori Profanarum Religionum*, c. vii. 6. *A raris Cretensibus adhuc mortui Jovis simulacris adoratur.*

⁷ Ἀναγωγή εἰς τὸν Τάνταλον, cited by Meursius, *Crete*: ἐπὶ τῷ τάφῳ δεικνύουσι κολῶνόν. Buondelmonti and other later writers refer to the tomb as above a cavern.

⁸ Dr. Joseph Hazzidakis, the President of the Cretan Syllogos at Candia, and now Ephor of Antiquities, informs me that the remains on the top of Mount Juktas are still known to the country people about as Μνήμα τοῦ Ζεῆ.

large roughly oblong blocks,¹ and within this enclosure, especially towards the summit, the ground is strewn with pottery dating from Mycenaean to Roman times, and including a large number of small cups of pale clay exactly resembling those which occur in votive deposits of Mycenaean date in the caves of Dikta and of Ida, also intimately connected with the cult of the Cretan Zeus. No remains of buildings are visible in this inner area, which tends to show that the primitive enclosure was the temenos of a sanctuary, rather than a walled city. On the uppermost platform of rock, however, are remains of a building constructed with large mortarless blocks of which the ground-plan of part of two small chambers can be roughly traced. A little further on the ridge is the small church of Aphendi Kristos, or the Lord Christ, a name which in Crete clings in an especial way to the ancient sanctuaries of Zeus² and marks here in a conspicuous manner the diverted but abiding sanctity of the spot. Popular tradition, the existing cult, and the archaeological traces point alike to the fact that there was here a 'holy sepulchre' of remote antiquity.

Attention will be called below to the scenes on two of the signet rings from Mycenae which certainly seem to point to a funereal cult of some heroic or divine personage, whose shield in one case is suspended to a shrine beside his pillar image.³ It is possible that the Mycenaean shield itself, which so often appears as a symbol in the field of gems and signets, at times represents, like the double axe, the aniconic embodiment of the divinity or departed hero. The shield borne by the warrior God on Mycenaean paintings and engraved rings passes naturally to his orgiastic worshippers, the Curetes or Corybantes of later cult. In the case of their Italian counterparts the Salii—the orgiastic priesthood of ancient Rome—the actual form of the Mycenaean shield is preserved in the Ancilia,⁴ which were themselves possessors of divine powers of movement and of warning clangour.⁵ The first Ancile was 'sky-fallen' like a baetylic stone.

§ 10.—*Small Dimensions of the Mycenaean Shrines.*

The shrines of such a baetylic form of worship as the Mycenaean are naturally small. In some cases we have seen a mere offertory slab, with its

¹ The spot was visited by Pashley (*Travels in Crete*, i. p. 252 *seqq.*) who gives a sketch of a part of the outer temenos wall. He also found the spot locally known as the 'Tomb of Zeus.' The best account of the circuit wall is that given by Dr. Antonio Taramelli, 'Ricerche Archeologiche Cretesi,' p. 70 *seqq.* (*Mon. Ant.* vol. ix, 1899), accompanied by plans and illustrations. I cannot find, however, in either writer any mention of the remains of the small building on the summit.

² See *Academy*, June 20, 1896, p. 513. The eastern and western ranges of Dikta, the sites respectively of the Temple and Cave of Zeus, are known as the Aphendi Vouno, from

Ἀφέντης Χριστός, or 'Christ the Lord.' A votive deposit, apparently connected with some Zeus cult, on a peak of Lasethi is also known as Aphendi Christos. It is, perhaps, worth noting in this connexion that at 'Minóan' Gaza Zeus Ktétagenês was known as Marnas, a form of the Syrian word for 'Lord.'

³ See below, p. 177, 180.

⁴ This comparison has been independently made by Mr. Warde Fowler, *The Roman Festivals*, p. 350. A similar shield, as Mr. G. F. Hill points out, is carried by the Juno of Lanuvium on Roman denarii.

⁵ Liv. *Epp.* lxxiii.

corner props, placed above the stone. In a succeeding section attention will be called to the sacred pillar placed beneath an arch or doorway or beneath the capstone of a kind of dolmen cell. To such primitive shrines, based on the megalithic chambers of a sepulchral cult, parallels can be found in various parts of the world. It will be shown, for instance, in the course of this study that the Indian dolmen cells with the baetylic stones set up within them, and the ancient megalithic shrines, such as those of Hagiar Kinn and Giganteja in the Maltese Islands or the Balearic Talyots, present a close analogy to the Mycenaean type in which the pillar itself acts as an additional support to the roof-stones. Of these baetylic cells the dove-shrines of the Akropolis tomb at Mycenae, with their triple division and summit altars, present a somewhat more complex type. A still further development of this tripartite shrine is now supplied by a fresco painting from the Palace of Knossos representing a small temple, largely of wood-work construction, in which the columns are clearly indicated as aniconic images by the 'horns of consecration' placed beside them and at their feet. A detailed description of this Mycenaean temple is reserved for a later section.¹

But even this, the most elaborate example of a Mycenaean sanctuary, is of small dimensions, as is shown by the human figures beside it and the horns within. The religious ideas indeed associated with this aniconic cult were far removed from those that produced the spacious temples of later times. The sepulchral chambers, the abode of departed spirits, supplied a much nearer analogy, and the true germ of their development. Of antliropomorphic temple images there is as yet no trace, and it was not necessary, as in later times, to accommodate the God with a palatial dwelling, which was in fact the glorified *megaron* of mortal kings. It is doubtless owing to the small dimensions of the Mycenaean shrines that up to the date of the recent Cretan discoveries so little trace has been found of places of worship among the monumental records of this period. A sacred tree too, it must be remembered, leaves no mark; its sanctuary is hypaethral, and the surrounding enclosure often of rustic construction.

§ 11.—*Aniconic Cult Images Supplemented by Pictorial Representations of Divinities: Transitions to Anthropomorphism.*

It has been remarked above that there is as yet no indication of temple images in human form. It is true that a certain number of figures appear on the Mycenaean religious designs, which may with great probability be taken to portray the divine personages themselves, rather than their worshippers. But it may safely be said that we have here to do with creations of religious fancy, rather than with the actual objects of cult. The idols remained aniconic, but the Gods themselves were naturally pictured to the mind of their worshippers under a more or less human aspect. It is probable that if more

¹ See p. 192 *seqq.*

of the Mycenaean paintings had been preserved, something like a complete view of this imaginative side of the religion might have been unfolded to us. Apart from the minor relics to which we shall presently turn, the only real indication of a cult scene is supplied by the painting on the stucco tablet found in a private house at Mycenae, in which two female adorants stand facing on either side an altar, by which is the figure of an armed God, protected by a great 8-shaped body-shield.¹ A figure of a God with rayed shoulders, holding a similar body-shield, also occurs on a painted ossuary from Milato, in Crete.² So, too, a fragment of a fresco from Mycenae itself also reproduces some of the strange Mycenaean daemons.³ Considering how very little has reached us of the pictorial art of this period, these surviving illustrations of religious subjects, as seen on these paintings, and still more on the signet rings, may be taken to indicate that in this way the outward forms of the Gods and their surroundings were fixed and familiarised by the Mycenaean artists long before they actually affected the shape of the cult images. Here the Gods or other supernatural beings stood portrayed as they were described in hymns and incantations, haunting their sacred seats, feasting in their celestial groves and gardens, or descending at the prayer of the votaries before their sacred pillars and altar-stones. On the Knossian ring already referred to a remarkable illustration will be found of this dual conception of divinity in its human and its pillar form.⁴ There an armed God is seen descending in front of his sacred obelisk, before which the votary stands in the attitude of adoration. It is the artist's attempt to express the spiritual being, duly brought down by ritual incantation, so as temporarily to possess its stony resting-place. Elsewhere we see the figure of a Goddess seated beside or even upon her rustic shrine, or, as in the case of the great signet ring from Mycenae, beneath her sacred tree, and tended by her hand-maidens. In other cases, as in the Lions' Gate scheme, we see the pillar image between its guardian monsters replaced on other parallel types by a male or female divinity.⁵

The coexistence of this more realistic imagery side by side with the material objects of primitive cult certainly betrays elements of transition. We discern already foreshadowings of the time, not far distant, when the mental conception of individual divinities would leave its impress on the rude stock or stone or more artistically shaped pillar which from time to time was supposed to become possessed with its spiritual essence. It is true, as already noticed, that the great mass of the small figurines of bronze and clay found in votive deposits of Mycenaean age must probably be regarded as representing the votary himself or his belongings, who were thus placed in the hands of the divinity. But it is by no means impossible that some exceptions exist to this rule, due perhaps in the first instance to the influence of Egyptian or Oriental practice. There is, for

¹ 'Εφημερίς 'Αρχαιολογική, 1887, Pl. X. 2, and p. 162; Tsuntas and Manatt, *Myr. Agr.* Pl. XI., p. 299.

² See below, p. 174.

³ 'Εφημερίς 'Αρχαιολογική, 1887, Pl. X. 1.

⁴ See below, p. 179.

⁵ See below, p. 163 seqq.

example, a fair presumption in favour of the view that certain specialised figures such as the bronze statuettes from Tiryns and Mycenae published by Schliemann may actually portray divinities and have partaken of the nature of cult images. To these two examples from Greek soil may now be added two more belonging to the same type, one of bronze found in the votive stratum of the Cave of Hermès Kraniaios, near Sybrita in Crete (Fig. 15) the other of silver found near Nezero, on the borders of Thessaly and Macedonia¹ (Fig. 16). The statuettes in question unquestionably show a close family likeness to certain North Syrian or 'Hittite' bronzes.² They have been supposed to represent imported fabrics from the same Oriental source; but their style is superior to that of the contemporary Syrian bronzes, and their more naturalistic forms proclaim them to be of true Mycenaean workmanship. Their characteristic attitude, as well as the Egyptianising helmet, brings them in close relation to the figures of Resheph, the Semitic Lightning God, on Egyptian monuments.³ A certain assimilation between this divinity and the Cretan Zeus may perhaps account for this likeness; and the discovery of an Egyptian bronze statuette of Amen, another foreign analogue to the indigenous Cretan God, amidst the votive figures

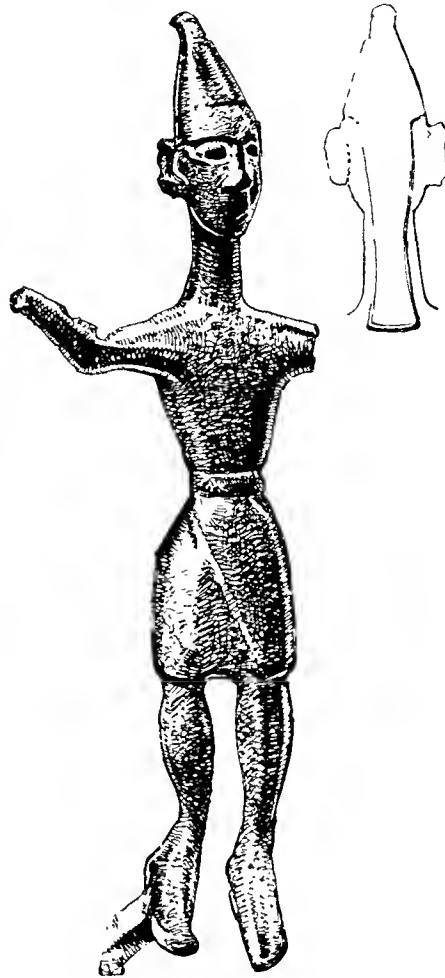


FIG. 15.—MYCENAEAN FIGURINE OF BRONZE FROM CAVE OF HERMÈS KRANIAIOS, NEAR SYBRITA, CRETE.

¹ Both are in the Ashmolean Museum at Oxford.

² For specimens of these Syrian bronzes see Perrot, &c., in. p. 405, No. 277. Hellag. *Question Mycénéenne*, p. 15 seqq. Fig. 6-9. One is from Antaratius (Tartûs), another from Laodicea (Latakiah), and two others from Northern Phoenicia. Another fine 'Hittite' example was in the Tyszkiewicz collection. Hellag, while admitting that the Peloponnesian examples 'révèlent un style

plus souple et qui, par la rondeur de ses formes, se rapprochent déjà considérablement de la nature', regards this as a more recent development of the same Oriental school, and, with Tsuntas (*Εφ. 'Αρχ.* 1891, p. 23), sees in them imported 'Phoenician' objects. But the Mycenaean examples are, if anything, earlier in date, and the two groups belong to very different schools, of which the Syrian is (as usual) the more barbarous.

³ See W. Max Muller, *Asien und Europa*.

of his Cave Sanctuary on Mount Dikta,¹ may not be an altogether fortuitous coincidence.

So many proofs have lately come to hand of the advanced character of Mycenaean civilization that it would certainly be rash to deny the possibility

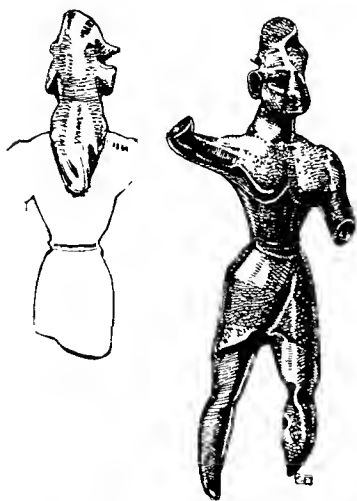


FIG. 16.—MYCENAEAN FIGURINE OF SILVER FROM NEZERO, THESSALY.

that even in the case of what may be called temple images proper, the transition from the aniconic to the anthropomorphic shape may not already have begun. According to the later Greek tradition² sculptors before Daedalos carved images without feet hands or eyes, so that they cannot have been far removed at all events from the simple pillar form. The great step in artistic advance was said to have been made by the mythical craftsman whose activity in the service of Minos seems to represent a real reminiscence of the brilliant creations of Mycenaean art such as we see revealed to us in the Palace of Knossos. The high level thus attained alike in painting and sculpture would seem to be in itself quite compatible with the existence of incipient anthropomorphism in cult images. A small marble hand, more-

over, found in the Palace, shows that human figures were at least partially modelled in the round. But there is nothing to prove that the figure in question represented a divinity, and religious conservatism, as well as the great mass of evidence before us, points distinctly the other way.

It may safely be said that, whatever elements of transition may have made themselves here and there perceptible, the prevailing character of the Mycenaean worship was of the older aniconic kind.

§ 12.—*Illustrative Survivals of Tree and Pillar Cult in Classical Greece and Italy.*

The most obvious and in some respects the most valuable sources of comparison with the Mycenaean cult of trees and pillars are the survivals of this ancient religious stage to be found on the soil of Greece itself. In the most representative cult centres of later Greece indeed, the character of the religious externals had undergone a complete revolution. Palatial temples had succeeded the mere fence or dolmen shrine, the pillar form of the divinity had been developed by successive attempts at anthropomorphism

¹ D. G. Hogarth, *Annals of the British School at Athens*, 1900.

² Tzetzes, *Chil.* i. 537. Themistius, *Ora-*

tiones, 15. p. 316 a. Cf. Farnell, 'Origins and Earliest Development of Greek Sculpture,' *Archaeological Review*, 1889, p. 169.

into a perfect work of art.¹ Isolated survivals indeed were to be found, such as the stone that represented the Thespian Eros or the wooden column of the Theban Dionysos, but for the most part even the most ancient *xoana* were already half human. The old baetylic and pillar forms, and the sacred trees that overshadowed them, fall into the background to make way for the anthropomorphic image of the divinity. Apollo leans gracefully against the pillar or sits upon the omphalos that were the earlier material representatives of his godhead. What had been already pictorially set forth by the engravers of the Mycenaean signets now belongs to the realities of cult.

Where, as in a few of the most ancient sanctuaries of Greece, the old tree and stone worship still held its own,² it is interesting to notice that this phenomenon generally coincides with the survival of the early ethnic stratum that has most claim to represent, in part at least, the Mycenaean element. The Pelasgic Zeus still abode among the oaks of Dodona. Beside the Castalian spring the sacred plane-tree of Zeus Agamemnon and the holy stone of refuge beneath it might claim precedence of the bay and omphalos of the Delphic God. The plane of Helena at Sparta and that of Menelaos at Kaphyae³ in Arcadia take us back to the same prehistoric stratum of the population. The great Arcadian Zeus, whose only shrine was the oak-woods of Mount Lykaeos, otherwise found his material shape in the twin columns that rose upon its topmost height towards the rising sun, in front of the mound that stood for his altar. The twin pillars, for which we have seen a striking analogy at Knossos⁴ in connexion with the Cretan Zeus, had once borne upon them symbolic eagles of the God, indicative of the bird-form under which, according to the widespread primitive belief, a spiritual being descends upon the sacred stone or other object as its possession.⁵ So, too, at Tegea, Zeus Teleios was represented by a square image, and Pausanias remarks that the 'Arcadians seem to have an excessive liking for this form.'⁶

In Crete again, where the continuity of early tradition was also exceptionally maintained, the same phenomenon confronts us. This is indeed the classic land of the *βαίτυλος*, the stone that Kronos swallowed, and which in reality represents the earliest material form of the indigenous Zeus. To the Cretan, too, as to the kindred Carian Zeus in his sanctuary at Labranda, the plane was specially sacred. The planes of Gortyna and of Theren, near Knossos, were celebrated for his union in the one case with Europa, in the other with a Goddess represented as Hera in the later Greek tradition. By Knossos, too, 'near the ruins of the house of Rhea,' was a very

¹ On the survival of this aniconic cult in historic Greece and its gradual transformation, see especially, L. R. Farnell, 'The Origins and Earliest Development of Greek Sculpture,' *Archaeological Review*, vol. ii. 1889, p. 167 *seqq.* and his *Cults of the Greek States*, i. p. 13 *seqq.*

² For the materials bearing on this subject I need only refer to the exhaustive work of Botticher, *Der Baumkultus der Hellenen*.

³ Called *Μενελαΐς*, Paus. viii. 23, 3.

⁴ See below, p. 170.

⁵ Paus. viii. 38, 7. M. Bérard, *De l'Origine des Cultes Arcadiens*, p. 73 *seqq.* has rightly seen that the pillars here, like those of the Phœnician Melkarth and other Semitic examples, represent the God. But it is not necessary to accept his conclusion that this shows Phœnician or Semitic influence.

⁶ Paus. viii. 48, 6.

ancient holy grove of cypresses,¹ and a black poplar rose before the mouth of the cave sanctuary of Zeus on Mount Ida. At Gortyna, Phaestos, Aptera, Hierapytna and other Cretan cities, the tree cult was still sufficiently strong in classical times to make itself visible on the civic coin-types.

Among the indigenous populations of Italy, the survival of very primitive forms of tree and stone-worship died hard under later Hellenic influences. It is probably due to an adoption of local Oenotrian cult that, outside Crete, we find the best representations of sacred trees, in one case with the sacrificial ox head hanging from its boughs, on the coin-types of Kaulonia. At Rome itself nothing can be more complete than the primitive conceptions of stone forms of divinity, such as Terminus and—to take the most natural interpretation of the words—Jupiter Lapis, or of tree forms, such as the beech Jupiter Fagutalis, and the oak Feretrius, from whose branches the *spolia opima* were suspended. To the Ruminal Fig-Tree there will be occasion to return, nor with Dr. Frazer's 'Golden Bough' before us need we linger in the Arician Grove. In later times it was rather in the rustic cult that the full spirit of the primitive 'tree and pillar worship,' continued to assert itself on Italian soil. A rich storehouse of illustrations is to be found in Greco-Roman reliefs, and especially in the wall-paintings of Pompeii, where we may venture to detect, beneath the Hellenistic embellishments, something of the old Oscan tradition. Some of these scenes afford very close comparisons to those that we find represented on the Mycenaean signets. We see the sacred tree surrounded by its ring fence, or thrusting its branches through its gate-like *sacellum*. Beneath it still rises the aniconic pillar form of the divinity, though here often used merely as the base of a small image of a sylvan God, or the support of a vase of offerings. Beneath it, too, is the rustic altar, and from its branches hang the votive clappers and festoons, and at times the heads of victims. It is interesting to note that, as in prehistoric days, so in later Greco-Roman times similar scenes of rustic cult are frequent subjects of the intaglios worn in finger-rings. It may here suffice to cite a single example of such a scene, engraved on a cornelian found at Rome and belonging to the Imperial period, which represents a group of three country-people setting up what appears to be an aniconic *xoanon* or pillar on a square base beneath a sacred tree.²

§ 13.—*The Ficus Ruminalis.*

There can be little doubt that on Greek soil many examples of tree and pillar worship that are met with in classical times may be regarded as local survivals of the Mycenaean cult. The early ethnic elements, Pelasgian and Achaean, with which they are connected, the associations with the House of Pelops and the Minyans, all point to an unbroken tradition. In Italy, on the other hand, the survivals of the primitive cult can hardly as a rule claim such

¹ Diod. v. 66.

² Furtwängler, *Antike Gemmen*, Pl. L. 33. The gem is in my own collection.

a direct relationship. But there is nevertheless some interesting evidence of a cumulative nature, which shows that Rome herself was indebted to prehistoric Greece for some of the oldest elements of her religion.

There can be no reasonable doubt that the *ancilia* represent the Mycenaean form of shield, which has, as we have seen, a profound significance in relation to the cult of the Cretan Zeus. But the whole group of legends that cluster about the *Ficus Ruminalis* take us back to the same primitive religious cycle. The Sacred Fig-Tree in fact is in a very different case from the beech of *Fagutalis*, the oak of *Feretrius*, or the cornel of *Quirinus*, the cult of which may well have been brought with them by the Latin immigrants from the north of the Apennines. The sanctity of the fig-tree belongs essentially to more southern Mediterranean climes. It was, as has been shown above, a sacred tree of the Mycenaean world, and its veneration was preserved to historic times on Laconian and Attic soil. At Rome, too, we find it traditionally connected with the most primitive element of Greece. Hard by the original seat of the *Ficus Ruminalis* on the Palatine was the Cave of Pan, connected with the old Arcadian cult. The fabled suckling of the twins beneath the tree by the she-wolf reproduces a legend of typically Arcadian form, which recurs in Crete, also in an Arcadian connexion. Arcas himself was the son of the solar Zeus *Lykaios*, by *Kallisto*, who is also a she-bear. *Kydon* the founder of *Kydonia*, but also claimed by the *Tegeans* as of Arcadian descent, the son of *Hermes* or *Apollo* and *Akakallis* a daughter of *Minos*,¹ was suckled by a bitch.² *Miletos*, the mythical founder of the Cretan city of that name, was nursed by wolves, sent him by his divine father, *Apollo*.³ The Cretan Zeus himself is suckled by the goat *Amaltheia*. The annexed design, representing an infant and horned sheep (Fig. 17), on a clay impression from a seal found with the hieroglyphic archives of the Palace at Knossos, may possibly afford a Mycenaean illustration of a similar legend.

In the case of the Roman version a further affinity with this primitive religious cycle seems to be indicated by the fact that the twins suckled here by the she-wolf beneath the tree were the offspring of *Mars*, who here appears in the aspect of a Sun God,⁴ his meeting with *Rhea Silvia* in the cave being accompanied by an eclipse. *Mars* here, in fact, is *Apollo Lykeios*, and, like the Cretan Sun God in the case of *Miletos*, sends his chosen animal to suckle his offspring. His sacred

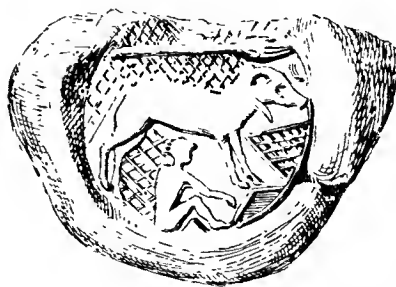


FIG. 17.—INFANT AND HORNED SHEEP FROM CLAY IMPRESSION OF SEAL; PALACE, KNOSSOS (i).

¹ G. Hoeck, *Creta*, i. 149 and 343.

² For the coins of *Kydonia* see *B.M. Cat.* 'Crete,' Pl. VII.; *Svoronos*, *Nomismatique de la Crète Ancienne*, Pl. IX. 22-26.

H.S.—VOL. XXI.

³ *Nikandros*, in *Antoninus Liberalis*, 30.

⁴ For the great community between *Mars* and *Apollo*, see *Furtwangler* in *Roscher's Lexikon*, s. v. 'Apollo,' pp. 444, 445.

shield, as we have already seen, is a derivative of the Mycenaean type borne by the warrior Sun God of prehistoric Greece.¹ The alternative name of his consort, Rhea, is not less significant and takes us back into the same mythic cycle. Here, too, as in Crete and the Peloponnese, the same traditions are associated with an old Arcadian element. Finally, if we have not here the 'tomb of Mars,' we have at least the tomb of his divine son Romulus, the actual monument of which seems to have been his pillar image, the 'niger lapis,' while the lions set on the bases at either side suggest the most typical of Mycenaean sacral schemes.² Religious parallelism could no further go. The coincidences of tradition are beyond the scope of accident and concern details which only the latest archaeological discoveries have brought to light.

§ 14.—*Illustrative Value of Semitic Religious Sources.*

In the preceding sections a few illustrative examples have been given of the survival of the primitive religious phase with which we are concerned in the Greek and Roman world. Some of these, such as the worship of the oak of Dodona, of the planes of Zeus Agamemnon or Menelaos, of the twin pillars of Zeus Lykaios, or the traditional veneration clinging to the tomb of the Apollo of Amyklæ or the Cretan Zeus, are of special interest, as showing the unbroken continuance in certain localities of the religion of Mycenaean Greece. On the whole, however, the remains of the primitive form of worship in classical Greece and Italy are too much overlaid and obscured by the later anthropomorphic tendencies to reproduce its vital spirit otherwise than fitfully and inadequately.

To understand the full force and inwardness of the old religion we have still to turn to the conservative East and notably to the Semitic records. It has ever, indeed, been the essential power of the conquering faiths that have proceeded from that side, that continuing to hold to aniconic forms of worship they have never been tempted to sacrifice the awe and dignity of spiritual conceptions to the human beauty of anthropomorphic cult.

In comparing some of the characteristics of the Mycenaean 'tree and pillar worship' with that revealed to us principally from Semitic sources as having existed on the eastern shores of the Mediterranean, we are certainly struck by a very deep-lying community. This community, indeed, seems in some respects to go beyond the natural parallelism for which a similar stage

¹ It is perhaps also worth remarking that, whereas in the *Ficus Ruminalis* Mars is represented by his sacred bird, the *picus* or woodpecker (Cf. *Mon. dell' Inst.* xi. Tav. 3, 1, the Bolsena Mirror, and the gem in Botticher, *Baumkulturs*, &c. Fig. 37), Kerdénos calls the Cretan Zeus 'πῑκος.'

² Mr. Cecil Smith (*Class. Rev.* 1899, p. 87, has noted, in relation to the recent discoveries,

that the 'niger lapis' of Festus represented a black baetylic stone, such as that of the 'Great Mother' brought to Rome from Pessinus. He also aptly compares the lions beside the 'tombstone' of Romulus with those of Rhea-Kybelé. He further suggests that the so-called Tomb of Romulus being a baetylic stone standing in a *hidentul* was naturally a '*locus funestus*.'

of religious evolution might naturally account. It is possible that direct Semitic influences may here and there have left their mark, as Egyptian certainly did, on the externals of Mycenaean worship. But in dealing with the phenomena of this very ancient form of cult, the underlying race connexion between the prae-Hellenic population of Greece and its islands and that of a large Anatolian region must also be taken into account. The ethnographic community, which has left its traces in the names of places and persons from Northern Syria to Western Greece, may well have had its counterpart in the survival of certain specialised forms of primitive religious tradition. At a later date, both in Palestine and Cyprus, we have the evidence of a return wave of Aegean occupation which must also have left its impress on the local cult. In Cyprus this is abundantly clear. On the Canaanite coast we seem to have at least one record of such a process in the late survival of the cult of the Cretan Zeus in Philistine Gaza.

The knowledge of the parallel cults of these East Mediterranean shores comes mainly through a Semitic medium and in a Semitised form. But a large part at least belongs only in a geographical sense to the Semitic world. This ancient underlying religious stratum whether in Anatolia or Palestine was itself simply taken over from the older stock. The pure Semite indeed is difficult to find in these regions. His very type has become Armenoid. In Cilicia and Northern Syria he has largely assimilated elements belonging to that old South Anatolian stock of which the Carians and old Cilicians stand out as leading representatives and which was itself linked on by island stepping stones to prehistoric Greece. In Cyprus the Semite partly absorbed Hellenic elements and converted the Apollo of Amyklæ into Reshep Mikal. In Mitanni and other Syrian regions he seems to have imposed his language on a race belonging to the same family as the later Georgian group of Caucasian languages. The Amorites have been ethnically grouped with the Libyans. In Philistia and other parts of the coast of Canaan colonizing Aegean peoples were merged in the same Semitic mass. Gaza was 'Minoan' and the eponymus of Askalon was the brother of Tantalos the founder of the Phrygian Royal House. *Tulkarian* Dor, in later days at least, traced its origin from Dôros. The prevailing elements in later Phoenician art more and more declare themselves as decadent Mycenaean, and the partial absorption of the intrusive European plantations on that coast may perhaps account for a spirit of maritime enterprise among the men of Tyre and Sidon quite foreign to Semitic tradition.

The undoubted parallelism observable between the tree and pillar cult of the Mycenaean and that of the Semitic world should be always regarded from this broad aspect. Even where, as will be shown, it extends to details it does not necessarily imply a direct borrowing from Semitic sources. Neither is it necessary to presuppose the existence in the Aegean world of a 'proto-Semitic' element in very early times. The coincidences that we find, so far as they are not sufficiently explained by the general resemblance presented by a parallel stage of religious evolution, may be regarded as parallel survivals due to ethnic elements and European affinities which on the east Mediter-

raean shores largely underlay the Semitic.¹ We must never overlook the fact that the most primitive culture that has come to light in large parts of Western Asia and in all probability the early population that produced it found its continuation on the European side. Similar classes of pottery, a kindred family of primitive sepulchral images, and apparently allied elements of an early pictography extend from Cyprus through Anatolia to the Greek island world, the Danube Valley, and still further afield. The *labrys* as we have seen is common to the Cretan and the Carian God.

But in any case it is the early religion of the Semitic world which affords the most illuminating commentary on what we are able to reconstruct from remaining records of the Mycenaean tree and pillar cult. It is from this side that the clearest light is thrown on the true inwardness of many of the cult scenes exhibited on the signet rings. It is indeed especially from biblical sources that this form of worship receives its grandest illustration. The Epiphanies and Visions of the Divine Presence beneath sacred trees and beside holy stones and pillars are the most familiar means of Old Testament revelation. It was in triple form beneath the terebinth of Mamre and in the burning bush, that Jehovah first declared himself to Abraham and Moses. So too it was beside the stone beneath his father's terebinth at Ophrah that the Angel of the Lord appeared to Gideon; and Joshua set up his Stone of Witness 'under the great oak that was by the Sanctuary of the Lord at Shechem.' Sometimes the tree is a terebinth or oak, sometimes the cypress, sometimes the tamarisk, sometimes, as in Deborah's case, the palm. Trees and pillars of Canaanitish Gods were overthrown, but others were planted and set up in honour of the Lord.² It was only 'graven images' that were condemned by the conservative precepts of the earlier Israelite cult.

The worship of the sacred stone or pillar known as *Mussēbu* or *nosb* is very characteristic of Semitic religion. The classical record of this form of worship is supplied by the biblical account of Jacob's dream with the stone for a pillow beneath his head. 'And Jacob rose up early in the morning, and took the stone that he had put under his head and set it up for a pillar, and poured oil on the top of it.'³ The pouring oil on the stone was a regular part of the ritual in the case of this pillar worship, and the name given by him to the spot, Beth-el—'the house of God,'—in reality attaches to the sacred stone itself, as appears from Jacob's subsequent vow, 'this stone which I have set up for a pillar shall be God's house.'⁴ It was in fact a place of indwelling of the

¹ It is the more necessary to bear in mind the above considerations that Dr. H. Von Fritze, in his recently published essay, 'Die Mykenischen Goldringe und ihre Bedeutung für das Sackalwesen,' in *Strana Helbigiana*, p. 73 *seqq.* has revived the endeavour to use the religious parallels observable between the Semitic religion and the Mycenaean cult scenes as an evidence of direct derivation from an Oriental source. He regards the Mycenaean

gold rings as 'imports from the East' (p. 79), and apparently (p. 82 *seqq.*) as of Phoenician fabric. Were it not for the fact that such views are still advanced, it would hardly seem necessary to point out that the rings belong to the same local Aegean school as the gems.

² Cf. Bottcher, *Baumkultus*, p. 520.

³ Genesis, xxviii. 18.

⁴ Genesis xxxviii. 22.

divinity. 'Bethel,' or parallel Semitic forms of the same word, have, as we have seen,¹ been brought into connexion with *baetylos*, the stone swallowed by Kronos, in other words the sacred stone of the Cretan Zeus. Whether the derivation is philologically correct or not it is certain that the same religious idea is common to both.

Such 'baetylic' stones among the Semitic peoples might be either stationary or portable like the twelve stones carried off by the representatives of the Twelve Tribes from the bed of Jordan which Joshua afterwards set up at Gilgal.² Here we have simply the setting up of rude natural stones, like the stone at Bethel, which had been declared holy by certain phenomena attaching to it.

But the later Semitic pillars are very frequently of hewn stone in the shape of a cone, truncated obelisk or column, and must therefore be regarded as the artificial equivalent of the rude stone idols that had preceded them. In some cases they may doubtless have been hewn from some sacred rock and thus stand to the more primitive class exactly in the relation in which the sacred pole or stock stands to the tree from which it was cut. But these later pillars seem in most cases to owe their sanctity to the spot on which they were set up, or to some special rite of consecration as well as to their shape or some holy sign carved on them.

The biblical records again and again attest the cult of the *Ashera*,³ either as a living tree or its substitute the dead post or pole, before which the Canaanite altars were set.⁴ The altar, regularly coupled with the *Ashera* in the primitive Canaanite worship, was doubtless often more than a mere table of offerings⁵ and was itself in fact a 'bethel.' In the case of the Ambrosial Stones which stood as the twin representatives of the Tyrian Melkart we find artificially shaped pillars of the more developed cult placed beneath the sacred olive tree of the God.⁶

The sacred trees of the Semites are often endued with a singular animistic vitality which takes us back to a very early religious stage. The tree itself has the power to emit oracular sounds and voices. It was the sound as of marching given forth by the tops of the mulberry trees that was to serve as the divine signal to David for his onslaught on the Philistines.⁷ Beneath the palm that bore her name Deborah the prophetess gave forth her soothsayings and drew the inspiration of her judgments.⁸ The Arabian hero, Moslim Ben 'Ocba, heard the voice of the gharcad tree appointing

¹ See above, p. 112.

² Joshua, iv. 5-9, 20-23.

³ Wrongly translated 'grove' in the Authorised Version.

⁴ The opinion that this was a Canaanite Goddess called Ashera is, as Robertson Smith (*Religion of the Semites*, pp. 188, 189) has pointed out, not tenable. 'Every altar had its *Ashera*, even such altars as in the popular, pre-prophetic forms of Hebrew religion were dedicated to Jehovah.' (Cf. Deut. xvi. 21.)

⁵ See Robertson Smith, *op. cit.* pp. 204, 205.

⁶ The olive tree, with the two pillars beneath it, is represented on colonial coins of Tyre of the third century A.D. They bear the legend **ΑΜΒΡΟCΙΕ ΠΙΕΤΡΕ** (Eckhel, *Doctrina Numorum*, iii. 389; Babelon, *Persees Achém.* p. xciv., Pl. XXXVII. 9, 11, 16). Cf. Pietschmann, *Gesch. der Phönizier*, p. 295.

⁷ II. Samuel v. 24.

⁸ Judges iv. 4-5qq.

him commander.¹ Holy fires play about the branches of such trees, without consuming them, as in the case of 'the burning bush,' the terebinth of Mamre and the sacred olive tree at Tyre.² The tree itself was at times endued with a mysterious power of locomotion and the fable of the trees going forth to choose a king³ may find its origin in a circle of ideas still represented in modern folklore. The Tyrian olive tree came out of the sea like the Ambrosian Stones that it overshadowed. Macbeth's incredulous exclamation :

' Who can impress the forest ; bid the tree
Unfix his earth-bound root ? ' ⁴

suggests no difficulty to primitive imagination. The saying of Birnam Wood moving to Dunsinane, rationalised in Shakespeare, receives a more literal fulfilment in Caucasia. Hotly pursued by his enemies the Ossete hero, Khetag of Cabarda, fell powerless outside the sacred grove to which he had fled for protection. A voice came from the linden trees, 'To the grove, Khetag, to the grove!' 'I cannot reach it,' he cried; 'I am quite worn out, let the grove rather come to me.' Thereupon the grove came and covered him from his enemies, and the glade is pointed out to this day from which the trees removed to save their votary.⁵

We are here no longer on Semitic ground, but the Caucasian folk-tale is singularly illustrative of the old ideas touching the spiritual life of sacred trees and groves, and the asylum given by them.

What gives the tree and pillar cult of the Semitic world and its borderland such a special value as an illustration of the distant records of the Mycenaean worship is its long continuous survival. While the aesthetic sense of the Greeks transformed their rude aniconic idols into graceful human shapes and veiled the realities of tree-worship under elegant allegories of metamorphosis, the conservative East maintained the old cult in its pristine severity. The pillar or cone, or mere shapeless block still stood within the sacred grove as the material representative of the divinity. In the famous black stone of Mecca Islam itself has adopted it, and the traditions of prae-Islamic Arabia maintain themselves in the shape of countless lesser Caabas and holy pillars throughout the Mohammedan world. In how unchanged a form this ancient pillar cult of the Semitic races still survives—even upon what was once counted as Hellenic soil—will be seen from a striking illustration given below from personal experience.⁶

In the foregoing pages it has simply been my object to recall some of the characteristic features of the old Semitic cult, many of them very

¹ Robertson Smith, *Religion of the Semites*, p. 133, who compares 'the old Hebrew fable of trees that speak and act like human beings.'

² *Op. cit.* p. 193.

³ Judges ix, 8 *seqq.*

⁴ *Macbeth*, act iv. sc. 1.

Svashchemiya roshdi i derevja u Kav-

kazkih narodov. (In *Reports of the Russian Geographical Society*, Caucasian Section, t. v. p. 158 *seqq.*) Khetag is the legendary ancestor of a peculiar dark-haired tribe among the Ossetes whose badge is the lime tree.

⁶ See p. 200 *seqq.*

familiar, in order to bring home something of the inner spirit of what once equally existed on the Aegean side. But over and above the more general points of comparison, such as those already indicated, there are correspondences in the details of the Mycenaean cult which make it necessary to bear in mind the fact already insisted on, that what has come down to us on the other side in a Semitised guise may itself be largely due to the former existence on the more Eastern Mediterranean shores of indigenous ethnic elements akin to those of prehistoric Greece. Into these more special points of conformity it is unnecessary to go minutely at this stage. The idea of the dual, triple and multiple representation of the same divinity in columnar or arboreal groups, external features, such as the shape of the altar base or 'the horns of consecration,' the conception of the sacred pillar itself as performing an architectonic function and serving as an actual 'pillar of the house,'—these and other similar points of coincidence in the Semitic and Mycenaean cults may be cited as showing that the parallelism implies a very close inter-connexion and at times, perhaps, even an underlying ethnic community. In some cases, however, these correspondences receive a simple explanation from a common Egyptian influence, which, as will be shown, has left its mark as clearly upon the externals of the primitive Aegean cult as it did on that of Phoenicia and on the monuments of the 'Hittite' religion that are found throughout a large part of Anatolia and Northern Syria.

§ 15.—*The Horns of Consecration.*

The piece of ritual furniture already referred to above, by anticipation, as 'the horns of consecration,'¹ plays a very important part in the Mycenaean cult. It is a kind of impost or base terminating at the two ends in two horn-like excrescences. At times these terminations have the appearance of being actually horns of oxen, but more generally they seem to be a conventional imitation of what must be regarded as unquestionably the original type. This cult object is evidently of a portable nature. Sometimes it is placed on an altar. Upon the remarkable fragment of a steatite pyxis from Knossos² it is laid on the top of a large square altar of isodomic masonry. On the summit of the 'dove shrines' from Mycenae it is superimposed in a reduplicated form on what appears to be the more usual altar-block with incurving sides.³ At other times it rises above the entablature of an archway⁴ connected with a sacred tree or on the roof of a shrine. It is frequently set at the foot of sacred trees. On a crystal lentoid from the Idaean cave⁵ we see it in its most realistic and horn-like aspect immediately behind an incurved altar in front of a group of three trees. On a gem from Palaeokastro in Eastern Crete⁶ it appears at the foot of a palm-tree. On the vase from Old Salamis it is set

¹ See p. 107.

² See Fig. 3, p. 103.

³ See Fig. 65, p. 191.

⁴ See Figs. 56, 58.

⁵ See Fig. 25, p. 142.

⁶ See below, p. 154.

at the foot of the double axe or *labrys*, which in this case is less a symbol than a material impersonation of the divinity. It is equally associated with

sacred pillars. On a Mycenaean gold ring it is placed at the foot of such a pillar, here seen within a shrine,¹ and it is unquestionably the same ritual object which is outlined beneath the three pillar idols on the dove-shrines from the third Akropolis grave.² Its appearance in a reduplicated form on the altar which forms the central prominence above has already been noted, and in addition to this it is also repeated above the entablature of what may be described as the lateral chapels, the doves here using the outermost horns as a perch. It thus appears no less than seven times on each of the gold shrines. In the remarkable fresco painting to be described below of the façade of a small Mycenaean temple from the Palace of Knossos this article of cult appears at the foot of both the two columns of the central shrine, and on

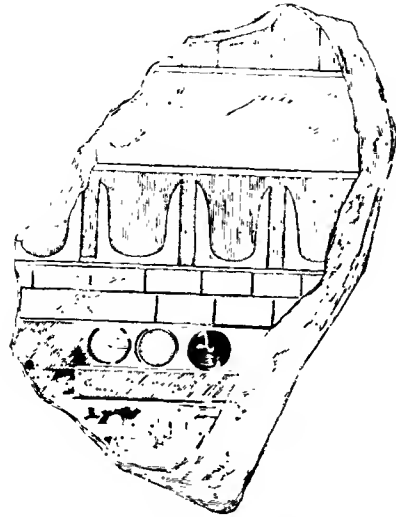


FIG. 18.—HORNS OF CONSECRATION ON SANCTUARY WALL, FROM FRESCO OF PALACE, KNOSSOS.

either side of each of those in the wings. On another fresco fragment from the same site reproduced in Fig. 18 four pairs of 'horns of consecration' are visible above the wall of what is evidently another sanctuary.

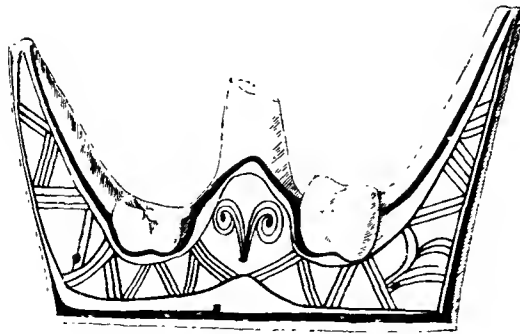


FIG. 19.—HORNED CULT OBJECT OF PAINTED POTTERY: IDAEAN CAVE.

An actual example of a similar article of cult may with great probability be recognised in a hitherto unexplained relie³ of painted terracotta (Fig. 19)

¹ See below p. 190.

² See p. 191.

³ Since this paragraph was written, Dr. P.

Wolters has made the same suggestion (*Jahrbuch d. k. d. Arch. Inst.* 1900, p. 148).

terminating in two horn-like projections found in the Votive Cave at Patso in Crete later dedicated to Hermes Kranaios.¹ A conical stem and two curved objects are seen between the two horns, but the upper part of these is broken off and their signification remains enigmatic. They represented no doubt the sacred object to which the clay horns were dedicated.

In some cult scenes, as we shall see, only a single horn is visible, but its presence probably implies the existence of another. There can be little doubt that in all these cases we have to do with a more or less conventionalised article of ritual furniture derived from the actual horns of the sacrificial oxen. The setting of the horns of the slaughtered animals before the cult image or upon the altar is a very familiar usage of primitive worship.

These Mycenaean 'horns of consecration' suggest at once the 'horns of the altar' of Hebrew ritual. These horns were no longer the actual horns of the victims, being of the same wood as the altar itself, in this respect standing to the original in the same secondary and symbolic relation as those of their Mycenaean equivalent. In this case there were four horns, one at each corner and these were of one piece with the altar.² But an absolute parallel with the Mycenaean usage on the Semitic side is to be found in a representation on the stele of the God Salm found at Teima in Northern Arabia and now in the Louvre³ (Fig. 20). The priest of this divinity is there seen before an altar having upon it two horns of consecration with the head of a votive ox immediately above. The cult object is here in a separate piece and corresponds both in form and position to its Mycenaean counterpart, as seen for instance on the altar of the Knossian pyxis. No parallel could be more complete.

A later illustration of a usage analogous to the placing of the 'horns of consecration' before the baetylic idol is to be found on a coin struck at Byblos under the Emperor Macrinus (Fig. 21),⁴ representing the temple of the local



FIG. 20 --ALTAR WITH HORNEO CULT OBJECT ABOVE. FROM STELE OF GOD SALM.

¹ F. Halbherr e P. Orsi, *Antichità dell'Atene di Zeus Ideo*, Tav. XIV. 3 and p. 227. Part of the horn of another similar object was found. Both were presented by Mr. T. A. Triphylli to the Museum of the Syllogos at Candia, together with other votive objects of Mycenaean date from the same cave.

² Exodus xxvii. 2.

³ Perrot et Chipiez, *L'Art. &c.* t. iv. p. 392. Fig. 206, from which the above sketch is taken.

⁴ The figure in the text has been specially drawn from a specimen of the coin in the British Museum. For other examples see

Astarte. In the centre of the court is seen the aniconic image of the Syrian Goddess in the form of a cone the base of which is enclosed by what appears to be a square lattice-work fence. The front side of this screen, which is all that is visible, shows two hornlike projections rising at each end. As there was probably one at each corner this arrangement shows a great resemblance to the 'horns of the altar' of biblical usage.

§ 16.—*Trinities and other Groups of Trees and Pillars.*

A noteworthy feature in the Semitic versions of the pillar cult is the setting up of more than one aniconic image of the divinity at the same spot.



FIG. 21.—CONE OF ASTARTE IN HORNED ENCLOSURE, TEMPLE COURT, BYBLOS, ON COIN OF MAGNUS (i)

At an earlier stage this is well illustrated by the twelve stones of Gilgal; at a later period by the votive stelæ of Carthage and of Northern Arabia. On the Carthaginian stelæ it is not infrequent to see three divine pillars like truncated obelisks, grouped together within the same shrine and upon a single base. In Fig. 22, from Nora (Capo di Pula) in Sardinia,¹ the symbol

Donaldson, *Architectura Numismatica*, No. 20. P. et C. iii. p. 69. Fig. 19; Pietschmann, *Geschichte der Phönizier*, pp. 200, 201.

Copied by me in the Museum at Cagliari.

where are several votive stones of the same kind from Capo di Pula. In other cases there are two stelæ on the same base. On a votive monument from Hadrumetum (Susa) (Pietsch-

above the central stele seems to mark the presence of Tanit, here represented in a triple form. On a votive monument from Lilybaeum bearing a dedication to Baal Hammon a worshipper stands before an incense altar accompanied by the symbol of divinity and a caduceus, while above is a base with three pillars of the usual kind.¹ Here again the trinity of pillars is still the abode of a single divinity, in this case Baal Hammon. Elsewhere we see two groups of three pillars and the divine symbols above them, and on a monument from Hadrumetum as many as nine pillars in a triple group of three occur on a single base.²

In the votive niches of the ancient sanctuary discovered by Doughty at Medâin Sâlih in north-western Arabia the aniconic form of a single

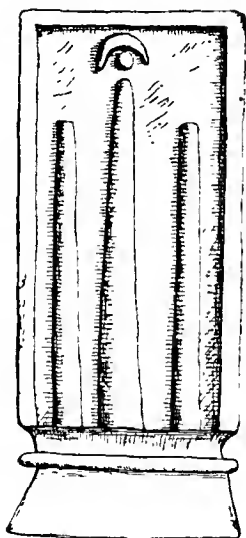


FIG. 22.—CARTHAGINIAN PILLAR SHRINE ON STELE, NORA, SARDINIA.

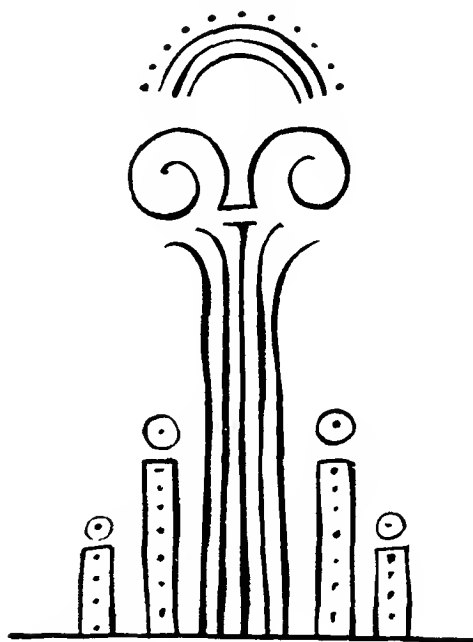


FIG. 23.—GROUP OF SACRED PILLARS ON MYCENAEAN VASE FROM HALIKI.

divinity is found indifferently represented by a single pillar or by groups of two or three.³ One of the niches, in this case containing a single

mann, *Geschichte der Phönizier*, p. 205) a single broad base, of the same form as that of Fig. 22, supports two smaller bases, with separate panels, each bearing a triple group of pillars. Above one panel is the orb and crescent; above the other the Carthaginian sign of divinity, a development of the Egyptian *Ankh* or life symbol.

¹ *Corpus. Inscip. Semit.* i. l. No. 138; P. Berger, *Rev. Arch.* 3rd s. iii. pp. 209-214;

P. et C. iii. p. 308, Fig. 232; cf. Pietschmann, *op. cit.* p. 206.

² Pietschmann, *op. cit.* p. 205.

³ See Doughty, *Travels in Arabia Deserta*, i. p. 121 and p. 187; *Documents Epigraphiques recueillis dans le Nord de l'Arabie*, pp. 21-23, Pl. XLV, XLVI; Ph. Berger, *L'Arabie avant Mahomet d'après les Inscriptions*, 1885, p. 19; P. et C. iv. p. 389-391.

pillar, bears a Nabataean inscription proclaiming the rock-shrine to be the Mesgeda (or Mosque) of 'Aouda the great God of Bostra' who seems elsewhere, like Baal Hammon and Tanit, to be represented in a dual or triple form.

It thus appears that throughout the Semitic world a single spiritual being could infuse itself at one and the same time into several material abodes. Groups of two or three pillars could be the visible embodiment of a single divinity—a conception which readily lent itself to such mystic dogmas as that of a triune God or Goddess, applied in the above instances to Baal and Tanit. It may be observed that the primitive conceptions underlying the adoration of the Cross have much in common with this Semitic pillar worship, and the Armenians to this day set up groups of three crosses, into which the Spirit of the Trinity in Unity is called upon to enter by a solemn rite of consecration.¹

I venture to believe that a group of divine pillars, closely analogous to those of the Carthaginian stelae and North Arabian shrines, may be recognised in the design on a Mycenaean painted vase from Haliki near Athens² (Fig. 23). The central object here seems to be a somewhat conventionalised rendering of a volute column, above which is a kind of triple halo, which may be compared with the radiate emanations of the Cypriote pillars.³ On either side of this central column are two pairs of smaller pillars in decreasing order, above each of which is a disc with a central dot identical with the Egyptian solar symbol. We recall the orb and crescent placed in a similar position above the Carthaginian pillar idols.

An analogous Mycenaean example of a group of sacred pillars is supplied by a recently discovered lentoid intaglio from Mycenae, in which a male figure is seen in the act of adoration before five columns of architectural character with vertical and spiral flutings. (Fig. 24.)

It is perhaps worth considering whether the well-known dove shrines of Mycenae may not supply a parallel of another kind to the religious conception of more than one aniconic pillar representing the same divinity. These shrines present three openings, in each of which is a similar column, the divine character of which is attested by the appearance at its base of the Mycenaean 'horns of consecration.'⁴ It is to be noted that above the shrines is only a

¹ I am informed of this usage by my friend Mr. F. C. Conybeare. The special consecration in the case of the Armenian crosses is partly due to the necessity of previously exorcising the evil spirits inherent in the material substance of the crosses.

² Furtwangler and Löschke, *Mykenische Vasen*, p. 39, Fig. 23. Few, I imagine, will agree with Dr. Ohnefalsch-Richter's view (*Kypros die Bibel und Homer*, p. 112), that we have here fantastic representations of wooden poles 'with human heads,' the middle one wearing a crown.

³ See below, p. 149.

⁴ I observe that Dr. Ohnefalsch-Richter (*Kypros die Bibel und Homer*, p. 183), though he has not understood the object of the foot of the columns, has rightly recognised in them Mycenaean *Maschab*, and compared their triple form with the Semitic groups. He saw in them 'Drei Chanumanim . . . die Abgesandten der Androgynen Gottheit Moloch-Astarte.' It is hardly necessary to observe that this precise attribution, and indeed the whole supposition, that they are purely and simply Semitic pillar idols, goes far beyond the evidence at our disposal.

single altar, so that if we have not here a single divinity in a triple form we have at least to do with *σύνθρομοι*. The doves certainly recall the Carthaginian and Libyan shrines of Tanit, whose pillar idol is so often three times repeated—in that case, however, in a single shrine.

The trimorphic or triune conception of divinity seems to represent a very early element in Greek religion, of which many survivals, such as the triple Hekate, may be noted in later times. The most interesting of these survivals is to be found in the later cult of Minyan Orchomenos, where, down to Pausanias's time, the images of the Graces, which were contained in the most ancient sanctuary of the place and received the greatest veneration, were three natural stones, which were said to have fallen from heaven. It was only in his own time that this group of primitive baetylic pillars was supplemented by artistically carved images.¹

On one of the more recently discovered gold signets from Mycenae² appears a sacral doorway, which at first sight seems to offer a more



FIG. 24.—WORSHIP OF GROUP OF PILLARS ON CYLINDER, MYCENAE (i)

literal parallel than any of the above to the threefold groups of baetylic pillars on votive or Carthaginian stelae and Arabian cave 'mosques.' Three apparent columns are seen ranged together within its open portal, but closer inspection shows that they are in fact the trunks of a group of three trees, whose branches rise above the impost of the shrine, which is thus shown to be of the hypaethral class. This triplet of sacred trees recurs on other Mycenaean seals, and may with great probability be regarded as the cult equivalent of the trinity of pillars in the dove shrines.

A good example of the worship of a trinity of sacred trees is supplied by a rock crystal lentoid found in the Idaean Cave,³ (Fig. 25). Here a female votary is seen blowing a conch-shell or triton before an altar of the usual Mycenaean shape. Above the altar is seen a group of three trees apparently cypresses, and immediately in front of them the 'horns of con-

¹ Paus. ix. 38, l.

² See below p. 183.

³ L. Mariani, 'Antichità Cretesi' (*Mon. Ant.* vi. 1895, p. 178, Fig. 12); Furtw. *Ant. Gomm.* iii. p. 47, Fig. 22. Fig. 25 represents

an enlarged drawing by Mr. F. Anderson from a cast obtained by me some years since at Candia. The gem is in the Museum of that town.

secreation.' To the right of the altar is a rayed symbol, to the left is apparently another altar base, with a conical excrescence, and behind the



FIG. 25.—WORSHIP OF GROUP OF TREES:
CRYSTAL LENTOLD, IDAEAN CAVE.

votary another tree. From this gem it appears that the conch-shell trumpet performed a ritual function in summoning the divinity. It may be observed that triton shells have been found in the Mycenaean beehive tombs in Crete, and are still in common use in the island, especially among the village guards (*χωροφύλακες*), as a means of raising an alarm or calling for help.

A triple group of trees, with their trunks closely drawn together, and having indeed the appearance of a single tree with a tripartite trunk, is presented by the gold signet ring from Mycenae, for the first time published in Fig. 56 below.¹

It is noteworthy that the sacred tree beneath which the Goddess is seated on the great gold ring from the Akropolis Treasure of Mycenae, exhibits the same tripartite stem.²

The equation of sacred tree and pillar makes it equally natural for the divinity to find a multiple impersonation in the arboreal as the stony shape. Of this too parallels are abundant on Semitic ground. The divinity may have a grove or group of trees as a place for indwelling, as well as a single tree. On a Babylonian cylinder,³ a pair of trees rises behind a God apparently defined as Sin by a crescent symbol. The fact that when Jehovah first revealed Himself to Abraham beneath 'the terebinths of Mamre,' He took the form of three persons, seems to point to the conclusion that there was here a special group of three holy trees.

In Egyptian cult, which in some of its most ancient elements shows a deep affinity with that of the Semitic world, we find evidences of groups of trees representing a single divinity. The god Min, whose worship, as is shown by the remains of his Koptos sanctuary, goes back into pre-historic times, is seen with two,⁴ three,⁵ or five⁶ cypresses, representing his arboreal

¹ See p. 182.

² See Fig. 4, p. 108.

³ Lajard, *Culte de Mithra*, xxvii. 6; *Culte du Cypres*, iv. 3.

⁴ Wilkinson, *Manners and Customs of the Ancient Egyptians* (1878 ed.), iii. p. 24, Fig. 504.

⁵ On a stele excavated by Prof. Petrie at Koptos, now in the Ashmolean Museum.

Fig. 26 is taken from a drawing of this kindly made for me by Mr. C. F. Bell.

⁶ Wilkinson, *op. cit.* i. p. 404, Fig. 173, iii. Pl. LX. r.; Rosellini, *Monumenti dell'Egitto*, iii. LVI. 3. and cf. Olmefalsch-Richter, *Kypros*, &c. Taf. clvi. 1, and p. 461, who compares the votive cypresses of the Cypriot sanctuaries.

shape placed behind him, either on a small shrine, on a base resembling a series of doorways (Fig. 26), or on a stand, the upper part of which has the characteristic moulding of an Egyptian house or shrine. In one case a king stands in front of the God, offering two miniature models of the same tree. At times the stand or shrine supporting the group of trees is carried by priests, like the Ark of the Covenant.¹ It will be seen that an Egyptian stand, similar to that which supports the tree equivalents of Min, served as the prototype of the bases on which are placed the baetylic pillars of the Carthaginian cult (see Fig. 22). On the same stelae, and again on the Cypro-Phoenician bowls,² it also serves as a pedestal for figures of the Gods themselves. It is true that Egyptian bases and stands with this characteristic profile and square moulding were also of more general usage,³ but the application of this form of support, in the one case for the sacred trees, in the other for the pillar idols, and again for the divinities themselves, is at least a suggestive coincidence.



FIG. 26.—TREE TRINITY OF MIN.

It is interesting to note that the alternative appearance of the tree impersonation of the God Min above either a shrine or a sacral base presents the closest parallels to the Mycenaean types in which the trees are placed immediately above the altar as in Fig. 25, or behind a sacred doorway as in Fig. 57. On the other hand the superposition of the Semitic and Libyan sacred pillars on the Egyptian base shows a perfect analogy with the placing of the column on the Mycenaean base or altar-block in the Lions' Gate scheme.

§ 17.—'The Pillar of the House.'

Another feature in the Aegean cult of baetylic pillars which finds a close analogy in the Semitic world is not only the frequent appearance of such pillars in an architectonic form, but their actual performance of a structural function. A very ancient parallel to such a usage may also be found in the Hathoric columns of Egyptian temples and, in another form, in the sacred Dad or Tat pillar with its fourfold capital that was supposed to support the four quarters of the heavens. In the Lions' Gate at Mycenae, and still more in the sacred columns of the small temple of which a wall-

¹ Wilkinson, *op. cit.* iii. Pl. LX. E.

² On the patera of Amathus, for instance (P. and C. iii. p. 774, Fig. 547), bases of this type serve as pedestals for hawk-headed divinities, and for the scarabaeus that they

adore.

³ E.g. as a table (Wilkinson, *Manners and Customs of the Ancient Egyptians*, i. p. 418, Fig. 194, 2); as the plinth of a building (*op. cit.* i. p. 346, Fig. 114, 1).

painting has been preserved in the Palace of Knossos,¹ will be found illustrations of the same religious idea. In a succeeding section we shall see the stone supports of the more primitive dolmen shrines of Mycenae already performing functions as at once the aniconic habitation of divinity and

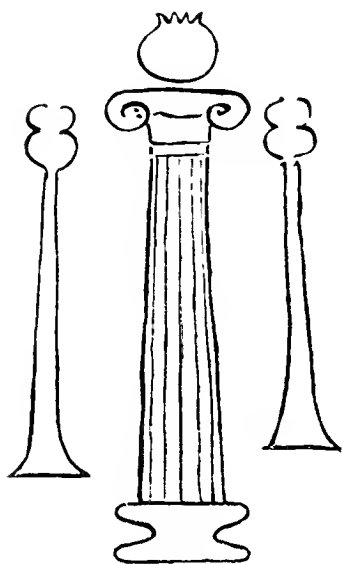


FIG. 27.—SACRED COLUMN ON
STELA, CARTHAGE.

‘pillars of the house’ and there will be occasion to point out some near parallels among the early megalithic structures of the Balearic and Maltese islands.

Many of the baetylic pillars of Semitic cult can be shown to have had the same architectonic form or even to have performed structural functions as supporting the architrave of a building. We are indeed expressly told of the brazen pillars set up by Solomon at the porch of the Temple that they were provided with capitals adorned with a network of pomegranates and of “lily” shape². In the same way Solomon’s friend and contemporary, Hiram of Tyre, is recorded to have set up a golden column in the temple of Baal.³ Free-standing columnar impersonations of the deity often supporting pomegranates are frequent on Carthaginian stelae⁴ (Fig. 27). At times the divine character of these is marked by a bust of Tanit placed upon the capital,⁵ or

her globe and crescent symbol appears upon the shaft. Tyrian⁶ and Cypro-Phoenician⁷ columns of the same class show the same symbols—here connected with Istar—carved upon capitals derived from the Egyptian lotus-type, a parallel which recalls Jakim and Boaz.

The names of the two columns in the front of Solomon’s temple—‘the Stablisher,’ and ‘in Him is Strength,’ which show that they were there placed as symbolic forms of Jehovah,⁸ would derive additional force if we might believe

¹ See below, p. 192 *seqq.*

² 1 Kings vii. 15 *seqq.*; cf. Jeremiah li. 21 *seqq.* The Capitals are described as of ‘Lily Work’ (1 Kings vii. 19). An elaborate restoration of these columns has been made by Chipiez (P. and C. t. iv. Pl. VI. and cf. p. 314 *seqq.*). But the lotus form is better given by De Vogüé, *Le Temple*, Pl. XIV.

³ Menander of Tyre, cited by Josephus. *Antiq.* viii. 5. It is called the temple of ‘Zeus.’

⁴ Copied by me in the Museum of Carthage. Cf. P. et C. t. iv. Fig. 167, p. 324, Fig. 168, p. 325.

⁵ *Gazette Archéologique*, iv, 1884. Prietschmann, *Geschichte der Phönizier*, p. 219. (Votive stone from Hadrumetum.)

⁶ In the Louvre, Musée Napoléon III. Prietschmann, *op. cit.* p. 274.

⁷ Three in the Louvre are given in P. et C. t. iii. p. 116. Figs. 51, 52, 53. Cf. Prietschmann, *op. cit.* p. 277. Four more capitals of the same kind, from votive stelae in the sanctuary of Aphrodité at Idalion, are figured by Ohnefalsch-Richter, *Kypros, die Bibel und Homer*, Taf. Ivin. lix.

⁸ Cf. Robertson Smith, *Religion of the Semites*, p. 298, n. 1.

that they actually performed a structural function in supporting the roof beams of the porch.¹ The duality of the columns in this case as in that of the bronze pillars of Melkart, in the sanctuary at Gades, at least points to the possibility of their having served a purpose of this kind, and the twin columnar forms of the divinity on either side of some of the Carthaginian shrines actually support an entablature.² By the 'two pillars of the house' of Dagon, which Samson is said to have overthrown at Gaza, are probably meant the pillars of the porch from the roof of which the Philistine lords would have watched the sport provided for them by the blinded hero. But the above analogies suggest that they may have actually represented the dual columnar form of Dagon himself, and though this feature in the story is not brought out by the narrator, it would certainly add a special point to the exploit.

Whether or not the two columns of Solomon's porch, or those of Melkart's temple actually themselves performed structural functions, it is certain that these Semitic types of the divine pillar were based on architectural models. Their columnar shape represents the divinity as 'a pillar of the house.' In the case of the Mycenaean examples of the same class their origin from wooden columns is clearly indicated by the round ends of the cross beams above the entablature as shown on the Lions' Gate and elsewhere. But this leads us to the obvious explanation as to at least one way in which the actual supporting pillars of a building could be regarded as having themselves a divine character. It would appear that the indwelling might of a tutelary God was secured by using in the principal supports of important buildings the wood of sacred trees. On the Mycenaean signets we shall see the columnar idol alternating in a similar position between the heraldic guardians, such as sphinxes and griffins, with the sacred tree.³ A curious instance is recorded of an unsuccessful attempt to convert a sacred tree to similar usage for a Christian temple. A wonder-working cedar, that had been transported from Lebanon to the King's garden at Mtsket, was cut down by King Miriam, to be used in the construction of the church, which he there founded. But in spite of all their efforts the workmen were unable to set up the trunk that was to support the roof. St. Nini then prayed for the scattering of the evil spirits, and in the night a youth with a fiery garment was seen to carry back the trunk to the height on which the tree had stood, and set it on its roots, whereupon it grew together again, and sweet-scented myrrh oozed forth from it as of old. It was only later that bishop John seeing the miraculous cures worked by the tree, and the idolatrous worship offered to it, made a more successful effort at its conversion, and with the aid of a hundred men brought it down once more and hewed it into a cross, in which shape it prolonged its wonder-working powers.⁴ A conspicuous instance of the employment of the

¹ The free-standing pillars shown outside the temple of Paphos on either side of the central opening with the cone of Aphrodite have been brought into comparison with Jakin and Boaz. They are sometimes however incense altars.

H.S.—VOL. XXI.

² Cf. a Carthaginian stela from Sulcis in Sardinia. P. et C. iii. p. 253, Fig. 193. The entablature bears the winged disk and uraei.

³ Compare below, p. 155 *seqq.*

⁴ 'Svashcheniya roshdi i derevja u Kavkaz-kih narodov,' *op. cit.* t. v. (Tiflis. 1877-1878).

trunk of a sacred tree as a 'pillar of the house' is afforded by a Byblian legend preserved by Plutarch.¹ The divine tamatisk, whose trunk had grown about the chest of Osiris, was cut down by the King 'Malkandros,' of Byblos the husband of 'Queen Astarte,' who had been amazed at its size, and made the principal support of his roof.²—in other words it was 'the pillar of the house' of Melkart. Removed at Isis' request to enable her to cut out the concealed chest of Osiris, the rest of the wooden pillar was transferred to the temple of Isis at Byblos, where it was still an object of worship in Plutarch's day. At Byblos it must be borne in mind that Isis and Osiris in reality represent Astarte and Adonis.³

In all this we see the columnar idol of the architectonic type taking its rise in the most natural way from the hewn trunk of a sacred tree made use of as 'a pillar of the house,' with the object of securing the presence of the divine 'Stablisser' inherent in the material. The character of the columnar divinity being thus fixed by its structural function in a wooden building can be taken over into stone or metal work, the conventional shape as in the case of Christian crosses supplying here the consecration no longer inherent in the material itself. In this secondary stage, however, the sanctity of such tutelary columns is generally further marked as at Tyre, Carthage and in the Phœnician remains of Cyprus by the addition of some symbol of divinity such as the orb and crescent, or as both on Semitic soil and at Mycenæ by the coupling with it of its sacred animals.

§ 18.—*Egyptian Influences, and the Rayed Pillars of Mycenaean Cyprus.*

The extreme antiquity of the anthropomorphic and here often zoomorphic form of cult image in Egypt may make it at first seem unprofitable to look for illustrations of the primitive aniconic cult of the Greek and Semitic world on that side. As a matter of fact, nevertheless, the old religious moment has left clear records in Egyptian monuments. The pre-historic figures of the god Min, discovered by Mr. Flinders Petrie at Koptos, still largely partake of the pillar form, and his equivalent materialisation, as a group of trees, survived through the historic period. The obelisk of the Sun-God Ra again represents the survival of the old cult image in a more artificial form. In the pillars with the head of Hathor we see a compromise between the aniconic and anthropomorphic type, frequent in later Greek religion, and the actual employment of these divine columns as supports of temples has been shown to have a very interesting bearing on a characteristic feature of the Mycenaean and the Semitic pillar cult.⁴ The Dad or Tat pillar (once called the Nilometer) with its quadruple capital indicative of the four supports of heaven, also at times becomes partially anthropomorphised like the Hathoric columns.

¹ *De Iside et Osiride*, c. 15, 16. Isis hovers round the pillar in the form of a swallow

κίονα τῆς στέγης.

³ Robertson-Smith, *op. cit.* p. 191.

² c. 15, ἔρεισμα τῆς στέγης; c. 16, τῆν

⁴ See above, p. 143.

The vegetable columns of Egypt, such as those derived from forms of the lotus and blue water-lily, are also in their nature sacred. Closely connected with these is a type of floral capital, the general outline of which, with its recurved side petals, may be often compared to a fleur-de-lys, the upper leaf of which is, however, generally provided with a marginal outgrowth of fan-like sprays so as to resemble a palmette. Two theories have been put forward to explain the origin of this palmette pillar. According to one version¹ it is simply due to an otherwise substantiated pictorial convention, first pointed out by Dr. Borchardt, in which the Egyptian artist combined the inside and profile view of an object. In this view the palmette and its side sprays represent half of the circle of a lotus flower as seen from above, with its radiating petals superimposed on the calix as seen in profile. Dr. Borchardt himself, on the other hand, points to the columns surmounted by fourfold capitals, among which this occurs, together with the lotus, the blue water-lily and the papyrus, as showing by analogy that it represents a distinct species. He calls it a 'lily' capital,² but there can be little doubt that the real original is the iris, which in our heraldic fleur-de-lys gave birth to a very parallel development on European soil. A similar evolution to a pure palmette form took place in Persia, where the iris is a favourite artistic motive. Several features in the flower itself combine towards this decorative evolution. The veining of the petals with a central stem from which minor striations radiate, their crinkled edges and the frequent association of the central upright petal, with two smaller seen edgewise on either side, are all so many elements which contribute in one way or another to suggest the idea of a palmette, already familiar in the East. But some iris types exhibit features which make the comparison with the palmette even more obvious. The beautiful *Iris reticulata* of the East Mediterranean countries has smaller petals growing out of the central vein of the larger in a fan-like fashion. The recurved ends of the lower petals again produce a decorative effect in Persian art, and in some types of the heraldic fleur-de-lys, closely resembling the drop-like excrescence on many of the Egyptian palmette pillars, which have puzzled archaeologists. They have been explained as drops of water in the act of falling from freshly emerged lotus flowers. But the idea is forced and the flower is not a lotus.

These palmette capitals are not apparently found in Egyptian art earlier than the eighteenth Dynasty, and they now seem to supersede the simple lily-like flower of Upper Egypt, which perhaps represents a flowering rush. Is it possible that this change in Egyptian decorative fashion was due to Mycenaean

¹ Flinders Petrie, *Egyptian Decorative Art*, pp. 68, 69.

² L. Borchardt, *Die Ägyptische Pflanzenwelt*, p. 18 seq.; *Die 'Lilien'säulen'*. In the Old and Middle Kingdom a simple 'lily'

type appears. It is only from the time of the Eighteenth Dynasty, however, that the type appears described by Borchardt as 'the lily with pendants,' and above as the iris or fleur-de-lys.

influence,¹ as to the strength of which the monuments of Tell-el-Amarna afford such remarkable evidence? The holy character of the iris on Hellenic soil is bound up, as is well known, with the legends of one of the most ancient indigenous divinities, Apollo Hyakinthos.² It seems, however, to have escaped notice that of the two kinds of flowers, evidently bearing a sacred character, offered by an attendant votary to the seated Goddess on the great signet ring from Mycenae,³ one is a lily, the other an iris, which, moreover, shows the characteristic palmette development. In a religious scene which, as will be shown, refers to the consort of an armed solar divinity, the appearance of this ancient emblem of Hyakinthos is not, perhaps, without significance.

Whether or not, however, we are to recognise in the appearance of the palmette capital on eighteenth Dynasty monuments an Egyptian adaptation of a Mycenaean religious motive, the essential fact with which we have to deal is that this fleur-de-lys type now takes its place beside the sacred lotus.

These palmette, or iris, columns, often provided with fantastic side sprays, form a common device of the glazed rings and moulds for such found in the Palace of Tell-el-Amarna.⁴ The incurving side sprays, seen on many of these composite vegetable forms, often recall those that rest on either side of the head-piece—the house of Horus—on the head of the Goddess Hathor. Closely allied, moreover, to this symbolic group are actual Hathoric posts or pillars with uraei curving up on either side of their base.⁵

These palmette pillars, and the more fantastic symbolic attachments into which they merge, have a great interest in their bearing on a whole series of derivative designs on a class of cylinders to which the name Cypro-Mycenaean can be appropriately given. These religious types, which are characteristic of the period of Mycenaean colonisation in Cyprus, belong to a separate category from the Aegean class, and form the subject of a special study of which it is only necessary here to reproduce a few summary results.

The Cypro-Mycenaean cylinder types unfold a series of religious scenes in which the central object appears in three inter-related forms.

It may be described thus :—

- (a) A palmette column ;
- (b) A fantastic vegetable pillar with a rayed summit ;
- (c) A rayed pillar or obelisk.

¹ This is Mr. F. L. Griffith's suggestion. He considers that the adoption of the iris type in eighteenth dynasty times may be due to Mycenaean influence.

² The literature regarding the flower *ὑάκινθος* has been summarised by Greve (Roscher's *Lexikon*, s. v. 'Hyakinthos.') The conclusion is 'es ist jedenfalls eine Iris-art

aber unbestimmt welche.'

³ Fig. 4, p. 108.

⁴ Petrie, *Tell-el-Amarna*, 199 *seqq.* Similar designs are seen on the moulds for glazed wall flowers from the same site, Pl. XVIII. 369 *seqq.* At times these are crossed with elements taken from the lotus.

⁵ See below, p. 150.

Examples of the two former classes are given on Fig. 28, 4-7, and the dependence of the two first on the contemporary Egyptian prototypes, illustrated in the same figure (Nos. 1-3), becomes self evident. The rays of the Cypriote pillar are, in fact, directly suggested by the radiating leaflets of the palmette type.

But the radiation itself, though its pictorial representation was thus facilitated by certain features in the symbolic Egyptian pillar, has also a distinct religious value. The rays indeed as the natural concomitant of divinities of light are a very ancient oriental tradition. Samas the Babylonian Sun-God is habitually represented with rays issuing from his shoulders and radiate divinities of the same class are not infrequent in the neighbouring Syrian and

Anatolian regions¹ which show a certain analogy with these Cypro-Mycenaean pillars. The luminous baetylic pillars of Melkart at Tyre repeat the same idea. How natural even to savage races is the addition of rays to the rude image that represents the Sun Spirit is well illustrated by a religious usage of the modern Melanesians. In the New Hebrides the stone which is regarded as the potential dwelling-place of the Sun Spirit 'is laid upon the ground and a circle of white rods which stand for sunbeams are set round so as to radiate from it in all directions.'²

In the radiation of the Cypriote pillars we see an adaptation of the radiating leaflets on the original palmette to a very widespread and primitive idea connected with solar pillars and images. The monsters associated with these columns as guardians and adorants are quite in keeping with this solar attribution. The griffins, sphinxes and lions that we see here before the sacred pillar or pillar tree are all taken from the Egyptian solar cycle. Of the Hathoric sprays attached to some of the more fantastic columns we have already spoken. In several cases, however, an adapted version of Hathor herself appears in long robes with a cow's head, and on one cylinder this figure is followed by a griffin adorant whose head is surmounted by the head-piece of the Goddess, the house of Horus, between two incurving sprays. On the important bearing of these designs on the cult of Mycenaean Cyprus this

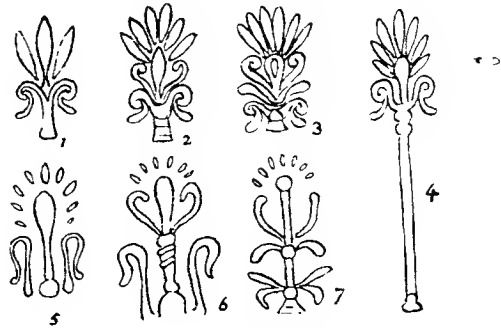


FIG. 28.—EGYPTIAN PALMETTE PILLARS AND THE RAYED PILLARS OF CYPRUS.
1-3. Egyptian Pillars. 4-7. Cypro-Mycenaean Derivatives.

¹ See especially Pietschmann, *Geschichte der Phönizier*, p. 225, who gives a good example of a rayed divinity with a pillar-shaped body, from the marble basin found at Sidon, now in the Berlin Museum. He compares with this certain representations of divinities on the coins of Demetrios II., Nikator (P. Gardner,

B.M.Cat. 'Seleucid Kings of Syria,' Pl. XVIII. 1, and XXV. 2), and others struck under Antoninus Pius in the Cilician town of Mallos.

² R. H. Codrington, *The Melanesians*, p. 181.

is not the place to enlarge. It may be sufficient to observe that in this period of Cypriote history the "golden Aphrodité" of the Egyptians seems to play a much more important part than any form of Astarte or Mylitta.

These Cypriote examples are of special interest in their bearing on certain religious types and associations from the Aegean area of the Mycenaean world. The more specialised forms of the rayed, fantastic, tree pillar are peculiar to Cyprus, but even these find analogies in some hitherto unexplained figures on Mycenaean vases, and we shall also see rayed divinities. On the other hand a simple form of the palmette pillar, approaching a fleur-de-lys in outline, is found on Mycenaean signets and the same group of guardian monsters recur in association with a whole series of Mycenaean pillars. The Cypriote parallels will be found to have a fundamental importance as demonstrating in detail that these are in fact taken over from the cult of Mentu-Ra the Warrior Sun-God of Egypt, of Hathor, and of Horus.

It is reasonable to believe that in the Aegean area as well as in Cyprus this taking over of the external elements from the Egyptian solar cycle was facilitated by underlying resemblances in the characters of the indigenous divinities to whom these attributes were transferred. The surviving attachment of some of these solar monsters to certain later divinities bears out this conclusion. The griffin and the lion remained in the service of Apollo.



FIG. 29.—HATHORIC URAEUS PILLAR AND CYPRO-MYCENAEAN AND ORIENTAL ANALOGUES.
1. Egyptian Uraeus Pillar. 2 and 3. Cypriote-Mycenaean Comparisons. 4. Dual Uraeus Staff of Istar.

It is further noteworthy that a certain mystic duality visible in the Hathoric pillars was taken over in a simpler form by Cypriote religion. The head-piece of Hathor represents the meaning of her name as the "House of Horus," and may therefore be considered as at the same time implying the internal presence of her divine son. It is sufficient to compare the annexed figure (Fig. 29, 1) of a Hathoric pillar with an uraeus snake curving up and confronting it on either side, taken from an Egyptian signet¹ of seventeenth or eighteenth Dynasty date with the two following designs of the Cypriote-Mycenaean class;² the latter, to make complete the comparison, on a flat rectangular bead-seal of the same form as the Egyptian. In both of these derivative designs we see a double column. In Fig. 29, 2, the incurving Hathoric sprays become two snakes whose coils on another Cypriote-Mycenaean

¹ Found in an intrusive burial at Kahun, Petrie, *Kahun, Gurob, and Hawara*, Pl. X 79, and p. 32.

² Fig. 29, 2 is from a cylinder, Cesnola, *Salamina*, Pl. XII, 7. Fig. 29, 3 *op. cit.*, p. 145, Fig. 128. Both are from Salamis.

cylinder are prolonged down the lower member of the column. In Fig. 29, 3 the pillar becomes quite symmetrical in its duality with an intervening slab to divide its two portions. Both of these Cypro-Mycenaean pillars are surmounted by a halo of rays, the original suggestion of which has been already noted. The radiation in itself connects them with divinities of light, a guardian griffin indeed sits before the pillar on the cylinder from which Fig. 29, 2 is taken. In some cases the double pillar is surmounted by a double halo of rays¹ emphasising the dual aspect of the divinity.

The Egyptian religious element in some of these Cypriote double columns is clear. But there is sufficient evidence to show that there was also an oriental class of dual pillars which may have influenced the cult forms of the island at an even earlier period. There occurs, for instance, a type consisting of double cones in reversed positions, their apexes separated by a cross-piece,² which is also found on Babylonian cylinders. Another oriental type of divided pillar must be regarded as in part at least of Egyptian origin. This is the staff or small pillar with a globular break in the middle of the stem and two uraeus snakes curving up on either side which so frequently occurs in the hands of Istar on late Babylonian cylinders³ (Fig. 29, 4). The uraei are here a certain indication of borrowing from the Egyptian side. Their symmetrical grouping recalls the snakes of the Hathoric staff or pillar already cited and forms a recurring feature in the derivative Cypriote types. The pillar stem of the Assyrian sacred tree frequently shows the same central division. But the Assyrian tree itself is in its origin a palmette column belonging to the same family as the eighteenth Dynasty Egyptian, and the earlier Cypro-Mycenaean class.

The pillar image of divinity as will be shown in connexion with the column in the Lions' Gate scheme has this distinct advantage over the anthropomorphic type that the same pillar can represent a divinity either in a male or female aspect or can become the material resting place of either member of a divine pair. Still more obvious facilities were offered by divided columns like the above for the needs of a dual cult. It gave easy expression to the Semitic religious conception of bi-sexual godhead. So too in Cyprus it might well convey the idea expressed by the alternative impersonation of Aphrodîtê and Aphroditos. The aniconic religion at least obviated such grotesque creations of the later cult as the 'bearded Aphrodîtê.'

¹ A Cypro-Mycenaean cylinder in the Ashmolean Museum.

² Dr. Olmeltseh-Richter, *Kypros*, &c. p. 182, has perhaps rightly recognised this type in the pairs of double axe-like figures grouped on either side of a serpent on a Cypriote cylinder (Cesnola, *Salamina*, p. 128, Fig. 118). He uses the word 'Chammanim' in connection with these double cones.

³ C. Menant, *Glyptique Orientale*, 1 p. m. Fig. 99, p. 165, Fig. 102; *Cat. Des Chacq.* Pl. XVI, Fig. 160. This class of haematite

cylinders is common in Syria and Chena, and a good example from Cyprus exists in the British Museum. The double staff with the *uraei* also occurs in a separate form between two figures of Hea-Bam contending with a bull, bearing the names of the Sun God Samas and apparently his consort (Menant, *Cat. Des Chacq.* i. Pl. VIII, Fig. 68 and p. 57), where, however, the comparison with the symbol of Istar is missed, and the object described as a 'candelabrum.'

To the bi-sexual Hermaphroditos indeed the pillar form clung down to much later times.

§ 19.—*The Egyptian Element in the Animal Supporters of Mycenaean Trees and Columns.*

Nothing is itself more contrary to the native genius of Mycenaean art. so free and naturalistic in its home-born impulses, than the constrained and schematic pose of the animals and mythical monsters that in this group of designs appear as guardians or supporters of the sacred trees and columns. But it is precisely because these attendant animals are here conceived of as performing a religious function that they take this heraldic and traditional form. It is usual to regard the pairs of opposed animals as due to oriental influence. It can be shown, indeed, that the reduplicated forms of mythical monsters are in some cases the natural result of the process of cylinder engraving as practised in Chaldaea at a very remote period. Certain types of the same class that appear on Mycenaean gems, such as the bulls with crossed bodies, the hero holding two lions in reverse positions, or the lions by themselves similarly grouped must unquestionably be due to Babylonian prototypes. But it must not be forgotten that in Egypt, too, these opposed heraldic pairs are a very ancient tradition. In the fresco of the prae-dynastic tomb, recently discovered by Mr. Green at Hierakonpolis, a hero is seen struggling with two symmetrically opposed bulls in a manner which, except for its rudeness, exactly recalls figures of Gilgames and Ecbani on Chaldaean cylinders. Paired heraldic animals are found in some hieroglyphic types, and on a monument of the sixth Dynasty two goats are seen symmetrically grouped on either side of a tree.¹ On a fragmentary vase of the black ware characteristic of the twelfth and thirteenth Dynasties, two pairs of goats are seen acting as heraldic supporters, in the one case of a palm-tree, in the other of a vine. It appears, moreover, that Egyptian models of parallel schemes found their way on scarabs, at least as far as Rhodes, and could be copied by the Mycenaean engraver on his native shores. In the well of Kameiros, together with a scarab bearing apparently the cartouche of Thothmes III,² was found another example³—in steatite of rude work—on which two bovine animals each with the Ankh symbol beneath it stand symmetrically facing a palm-tree. In considering the Lions' Gate scheme we shall have occasion to note the parallel grouping of Ra and Ma before the solar obelisk and of the two lions supporting the sun's disk on the horizon.⁴ We have, moreover, direct evidence that, in another shape, the Mycenaean was familiarised with the Egyptian scheme of a sacred pillar between heraldically opposed animals. This scheme is, in fact, very frequent about the time of the eighteenth Dynasty under the form of

¹ Lepsius, *Denkmäler*, iv. Taf. 108, 111; cited by Riegl, *Stilfragen*, p. 40.

² *B.M. Gem. Cat.*, No. 144.

³ *Ib.*, No. 142. The animals are there de-

scribed as wolves; to me they seem clearly oxen, though roughly drawn; *Myk. Vasen* Pl. E, 39.

⁴ See below Fig. 42.

the Tat pillar between two symmetrically grouped uraens snakes, and a scarab¹ with this design was found in one of the group of Mycenaean graves at Ialysos, from another of which a lentoid gem representing the column between two lions was brought to light. At Tel-el-Amarna, where Egyptian and Mycenaean culture find more than one point of contact, scarabs with similar designs of the Tat and Uraci also occurred.

It is further to be noted that the distribution of the guardian animals as regards the trees and foliate pillars on the one hand and the architectural columns and bases on the other seems to follow a division already perceptible among their Egyptian prototypes. Setting aside the mythical monsters which to a certain extent at all events seem common to both groups we find the heraldic grouping of oxen and goats confined to the trees or tree pillars. The lions alone are associated with the structural columns and altar bases just as in Egyptian religious art we find them exclusively acting as supporters of the symbol of the sun on the horizon.

The general conclusion to which we are led is that the animals symmetrically posed and paired before trees and pillars in these Mycenaean schemes represent a tradition borrowed from Egyptian sources. The conventional scheme had certain religious associations and was therefore adopted for animals performing sacral functions as guardians of holy trees and baetylic columns. It has been already noted that several of the monstrous forms represented in the Mycenaean series like the Sphinx, the Kriosphinx, and the Griffin are themselves Egyptian creations and of their nature divine. In other cases the sacred character of the animal is indicated by the conventional pose of ancient tradition.

§ 20.—*Sacred Trees and Foliated Pillars with Heraldically Posed Animals.*

The sacred tree, when it occurs on Mycenaean designs of the heraldic class at present under consideration, is generally more or less conventionalised in form and often shades off into the foliated pillar. A somewhat naturalistic example (Fig. 30) may be cited from a lentoid gem found in a tomb of the Lower Town of Mycenae in 1895.² The tree here rises from a kind of base and on either side with their heads turned towards it are two wild goats or *agrimia* back to back, who in each case rest their fore feet on a structure rising in two high steps.

In Fig. 31 from a lentoid gem found at Palaeokastro on the easternmost point of Crete³ we see a single wild goat in a similar heraldic attitude before a tree of conventional type with side sprays and trefoil crest. Behind the *agrimi* is a smaller animal with the feet and hindquarters of an ape which seems to be in the act of springing on it. It suggests the *Cynocephalus* that appears in the field of some Babylonian cylinders. To the

¹ *Myk. Vaseu*, Taf. E, 2.

² A banded agate.

³ A striated chalcedony. I obtained it on the site in 1898.

right of this is an object like an impaled triangle which has probably some religious significance and occurs elsewhere in sacral subjects.¹ The two-horned object placed at the foot of the tree pillar will be seen to be the



FIG. 30.—SACRED TREE AND WILD GOATS ON LENTOID GEM FROM MYCENAE ($\frac{1}{2}$).

characteristic concomitant of Mycenaean cult referred to above as 'the horns of consecration.' Its appearance in this place is of considerable importance as affording a proof that we have here to deal with a conventional represen-



FIG. 31.—SACRED PALM AND WILD GOAT, LENTOID, PALAKASTRO, CRETE ($\frac{1}{2}$).

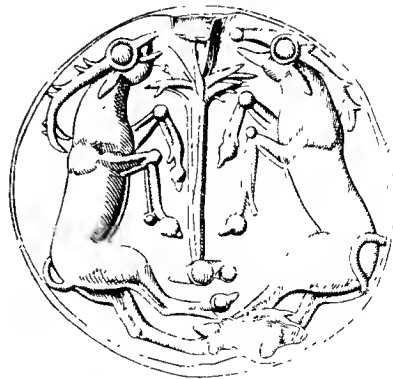


FIG. 32.—TREE PILLAR AND ANIMALS LIKE RED DEER: LENTOID GEM, GOULAS, CRETE ($\frac{1}{2}$).

tative of a sacred tree. It indicates the holy character of the tree before which it is placed as in other cases its occurrence at the foot of the pillars in Mycenaean shrines declare them to be the aniconic images of divinity.

¹ See below, p. 159.

Had this design been fully carried out it would have doubtless included a second wild goat as a supporter on the other side of the tree. From its schematic attitude this belongs to the same class as the opposed pairs of sacral animals.

Fig. 32¹ presents an example of a tree or tree-pillar with conventional, palm-like foliage, and a fluted columnar shaft supported by what to judge from their horns are a pair of red deer. Both this and the two preceding designs show curious points of resemblance to the stele found by Count Malvasia at Bologna in a cemetery of the Villanova class.² Upon this stele a conventional palm-column in two stages is seen between two calf-like supporters whose heads, as in the case of Fig. 34 below, are turned away from the column.

A good illustration of the fleur-de-lys type of foliated pillar akin to those of Mycenaean Cyprus and contemporary Egypt is supplied by a gold signet ring from the Lower Town of Mycenae (Fig. 33).³ Here we see a fluted



FIG. 33.—FLEUR-DE-LYS PILLAR AND CONFRONTED SPHINXES, ON GOLD SIGNET RING, MYCENAE (1)

pillar resting upon a bowl-like base, the foliage of which still suggests the original iris type. On either side of this 'hyacinthine' column and confronting it is seated a female Sphinx of the Mycenaean type, with double crest and curling locks visible on the bosom. The sleeved appearance of the upper part of their forelegs is a frequent characteristic of oriental Sphinxes,

¹ It was found at Goulas in Crete (cf. *Goulas, the City of Zeus*, p. 24). The stone is a lentoid, of translucent and milky chalcidony.

² Gozzadini, *Di alcuni Sepolcri della Necropoli Etrusca*, p. 20; Undset, *Zeitschrift für Ethnologie*, B. xv. p. 214. S. Reinach, *Anthropologie*, 1893, p. 707, and *Les Celtes dans les Vallées du Pô et du Danube*, pp. 165, 166, gives a conjectural restoration (Fig. 93) of the monument as inserted in the tympanum

of a gate of prehistoric Felsina. A comparison of the stone with other sepulchral stelae in the Museum at Bologna has, however, convinced me that it belongs to the same class. Several of these terminate above in conventional palmettes like so many of the later Greek stelae.

³ Cf. Perrot et Chipiez, *L'Art*, &c. vi, Fig. 428. 22; Furtwangler, *Ant. German.*, III. p. 42, Fig. 17.

and is undoubtedly a feature taken over from the hawk of the Egyptian Sun-God Horus. The Sphinx itself belongs, of course, to the same solar cycle, though in Egypt it is rarely of the female sex. Elsewhere we shall see the Sphinx, like the Griffin, as a guardian of the architectural column.

A very similar type of foliated pillar with two young bulls or oxen symmetrically attached on either side, occurs on another gold signet ring from Mycenae.¹ A close parallel, again, to this is presented by a beautifully engraved ring cut out of a single piece of rock crystal which was found some years since at Mycenae (Fig. 34).² Two couchant bulls with their heads turned back are tethered to the foliate pillar in the same way as in the preceding example, the only difference being that two additional sprays of the same conventional kind rise from behind their backs. On a lentoid

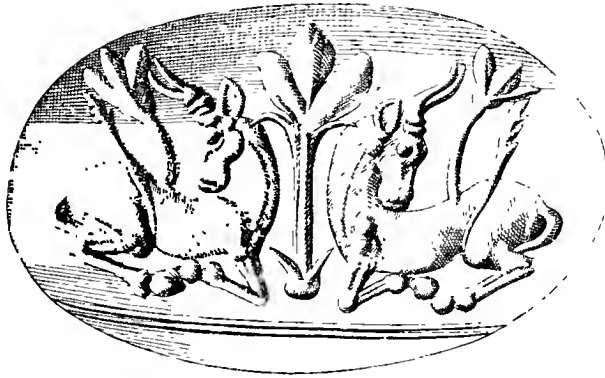


FIG. 34.—PILLAR TREE WITH YOUNG BULLS ATTACHED: CRYSTAL SIGNET RING, MYCENAE (1)

bead seal³ two animals, one a bull and the other a wild goat, are symmetrically ranged beside a pair of conventional tree-pillars with spiral shafts and tri-foliate sprays.

§ 21.—*Architectural Columns with Animal Supporters: the Lions' Gate Type.*

The most conspicuous example of purely architectural columns with animal supporters is the tympanum relief of the Lions' Gate at Mycenae (Fig. 35). But in this case the position of the column, as if fulfilling an architectural, and at the same time a decorative purpose, has to a great extent diverted archaeological students from its true religious significance.⁴ The lions

¹ From Tomb 25 of the Lower Town. Tsuntas, 'Εφ. 'Αρχ. 1889, Pl. X 43. and pp. 143 and 179. Tsuntas describes the animals as horses, δύο ἵπποι (ἄγριοι); but short horns are clearly discernible.

² In my own collection; hitherto unpublished.

³ Of agate, from Tomb 10 of the Lower Town Mycenae. Tsuntas, 'Εφ. 'Αρχ. 1888, Pl. X. 7 and p. 140; Furtwängler, *Ant. Gemmen*, iii. 27.

⁴ M. Salomon Reinach, however, has shown himself alive to its true significance, and in his 'Mirage Orientale' (*Anthropologie*, iv.

have not been recognised as the sacred animals and companions of a tutelary divinity, but merely as symbolic figures of the military might of those who held the walls of the citadel, and as a challenge to their foes.¹ The column itself and the architrave and beam-ends that it supports have been taken, with the altars below, to stand for the Palace of the Mycenaean Kings.² Some of the earlier writers, indeed, advanced views on the subject of this relief, which in certain respects very nearly approximated to the true explanation. Colonel Mure,³ and after him Gerhard,⁴ and Curtius,⁵ saw in the column

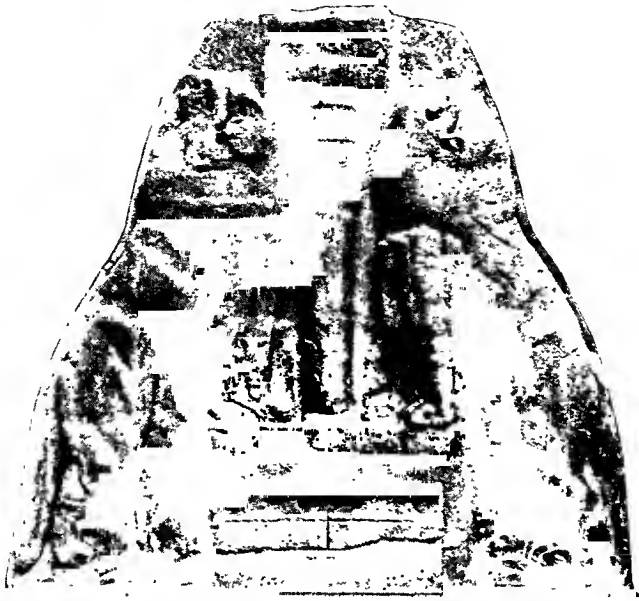


FIG. 35.—TYMPANUM RELIEF OF LIONS' GATE, MYCENAE.

between the Lions a 'symbol' of Apollo Agyieus, and Götting regarded it as a Herm.⁶ But such comparisons have been wholly set aside by most later critics.

1893, p. 705 and p. 730) not only rightly describes the column as an ameion image, but uses the fact of the appearance of the Goddess in its place on the monument of Arslan Kaya as an argument for the later date of the Phrygian relief.

¹ Perrot et Chipiez, *Grèce Primitive*, p. 800.

² Brunn, *Griechische Kunstgeschichte* (1893) pp. 26-28; Perrot et Chipiez, *op. cit.* p. 801.

³ *Ueber die königlichen Grabmäler des heroischen Zeitalters*, *Rhein. Museum*, vi. (1838), p. 256. Col. Mure thought the lions

were wolves, and brought Apollo Lykeios into connexion with them.

⁴ *Mykenische Alterthümer* (10^{ter} Programm, Berliner Winckelmannsfest, Berlin, 1850) p. 10.

⁵ *Poloponnesos* (Gotha, 1852), ii. 405, and *Gr. Geschichte*, i. 116.

⁶ *N. Rhein. Museum*, i. (1842) p. 161. Götting notes the correspondence between the Mycenaean column growing smaller towards its base and the Hermæ pillars—a pregnant observation.

The fact that the column had a capital, and in this case actually supported a roof, was pronounced by Dr Adler to be fatal to the view that any aniconic form of a divinity could be here represented, 'all such idols having a free ending as a cone, a meta or a phallus.'¹ It has been shown above, however, that the idea of the divine column as a 'Pillar of the House,' and actually performing a structural function is deeply rooted in this early religion, and finds parallels both on the Semitic and the Egyptian side. In the succeeding sections a series of Mycenaean shrines will be described in which the stone pillar which is the aniconic form of the divinity is represented as actually contributing to prop up the capstone or lintel. In the Lions' Gate and kindred types where the column stands for the support of a building, the capital and impost are in fact required to bring out the full idea of the upholding spiritual power. The divinity here is the 'pillar of Mycenae,' even as Hector is described by Pindar,² as the 'pillar of Troy.'

The Lions' Gate scheme is found, sometimes in an abbreviated form, on a series of Mycenaean engraved stones and rings, some examples of which are given below, associated with the same sacred animals. In other cases we

find the pillar, or simply the altar base, guarded by Sphinxes, Griffins, or Kriosphinxes.

On the ivory plaque from the Tholos tomb, at Menidi, two Sphinxes stand³ on either side of a Mycenaean column. A small figure of ivory from Mycenae⁴ represents a Sphinx resting both forelegs on the capital of a short column. In Fig. 33 we have already seen Sphinxes as guardians of a tree pillar.

A lentoid gem from Mycenae (Fig. 36)⁵ gives the best architectural parallel to the Lions' Gate pillar, save that here we see a pair of Griffin supporters in place of the lions. The column here rests on a single altar base instead of two.



FIG. 36.—PILLAR WITH GRIFFIN SUPPORTERS;
LENTOID, MYCENAE (?).

It is spirally fluted, and above the capital is seen a part of the entablature with the round ends of the transverse beams as on the tympanum reliefs.

¹ *Arch. Zeitung*, 1865, p. 6. 'Alle solche Idole niemals in der Form einer mit einem Capitell geschmückten Saule (welche hier sogar eine Decke trägt) sondern stets frei beendigt als Conus, Meta, Phallus erscheinen.'

² *Ol.* ii. 145, Τροίας ἑμαχόν ἀστραβῇ κίονα.

³ Lolling, *Kuppeltomben von Menidi*, p. 20. Perrot et Chipiez, *L'Art.* &c., p. 528, Fig.

208.

⁴ Tsuntas, *Ἐφ. Ἀρχ.* 1887, Pl. XIII. 'n. and p. 171. P. et C. vi. p. 833, Fig. 417. where however it is erroneously described as 'from the Acropolis of Athens.'

⁵ Tsuntas, *Μυκῆναι*. Pl. V. 6; Ts. and Manatt, *Myc. Age*, p. 254, Fig. 131. Furtw. *Ant. Gemm.* vol. iii. p. 44, Fig. 18.

The Griffins, with their heads turned back, are attached to the upper part of the column like watch dogs by a thong or chain, a constantly recurring feature in these designs.

A scheme closely allied to the above, in which, however, the altar-base appears without the column, is supplied by a jasper lentoid from Tomb 42



FIG. 37.—DOUBLE-BODIED KRIOSPHINX WITH FORE-FEET ON BASE: LENTOID GEM, MYCENAE ($\frac{1}{2}$).



FIG. 38.—DOUBLE-BODIED LION WITH FORE-FEET ON BASE: LENTOID GEM, MYCENAE ($\frac{1}{2}$).

of the Lower Town, Mycenae (Fig. 37).¹ Here we see a composite animal, in which the bodies of two opposed lions meet in the single head of a ram, resting its forefeet on the base. To the right is a symbol like a pole transfixing a triangle, which has been already referred to as a frequent concomitant of Mycenaean religious scenes, and may perhaps represent



FIG. 39.—LIONS' GATE TYPE ON GOLD SIGNET RING, MYCENAE ($\frac{1}{2}$).

some kind of 'Ashera,' making up in this case for the absence of the architectural pillar. The composite monster itself of which this is the

¹ Tsuntas, 'Εφ. 'Αρχ. 1888, PL. X. 30, and p. 178; P. et C. Fig. 428, 17; Furtw. *Ant. Gemm.* Pl. III. 24. He describes the monsters

(vol. ii. p. 23) as 'zwei geflügelte und gehörnte Löwen.'

reduplicated form, is, in fact, the Egyptian Kriosphinx, here, however, fitted with wings according to the Mycenaean practice. At Karnak huge Kriosphinxes—with the head of a ram and the body of a lion—guard the avenue of the Theban lunar God Khonsu. An analogous design, representing a double-bodied lion, with a single head, his forelegs resting on a similar base, occurs on another lentoid from Mycenae (Fig. 38.)¹

On rings and gems, indeed, the more usual guardians of the sacred pillar are lions. A gold signet-ring from Mycenae (Fig. 39)² shows a pillar with a somewhat broad entablature to which two lions are attached by chains round their necks. The animals look back at the column, and two objects of uncertain character attached to the end of the entablature on either side, hang down in front of their noses. These objects, which in their general outline somewhat resemble the two alabaster knots found in the fourth Acropolis grave at Mycenae,³ have perhaps a sacral character, for, on the



FIG. 40.—LIONS' GATE TYPE ON LENTOID GEM, ZÈRO, CRETE (⁹).

Heraeum gem,⁴ two similar are seen on either side of a bull's head, above which is the symbolic double axe.

A cornelian lentoid from grave 33 of the Cemetery of Ialysos⁵ shows a rude and straggling design of a column with two lion supporters looking outwards. Another hitherto unpublished variant of the type is supplied by a brown cornelian lentoid gem (Fig. 40) obtained by me at Zêro in Eastern Crete. Two lions are here symmetrically seated back to

¹ From tomb 8 of the lower town of Mycenae. Tsuntas, 'Εφ. 'Αρχ. 1888, Pl. X. 2, and p. 175; P. et C. vi. Pl. XVI. 20; Furtw. *Ant. Gemm.* Pl. III. 23.

² Formerly in the Tyszkiewicz Collection, at present in my own. Frohner, *Coll. Tyszk.*, Pl. I. 3.

³ Schliemann, *Mycenae*, p. 242, Fig. 352.

⁴ See above p. 109.

⁵ B. M. *Gem. Cat.* Pl. A. 106; Curtius, *Wappengeschichte und Wappenstil*, p. 111; Furtw. u. Loschke, *Myk. Vas.* Pl. E. 6, pp. 15 and 75; Furtw. *Ant. Gemm.* Pl. III. 20.

back with their heads turned towards the column above which are some traces of the round beam ends of the entablature.

The base on which the two lions rest their forelegs on the lentoid gem represented in Fig. 41¹ must not be confounded with the usual altar base seen in Figs. 37 and 38 above, the typical feature of which is the incurving sides. It is essentially columnar, and its true meaning has been shown in an earlier section of this work.² It represents, in fact, one of the baetylic tables of offering, which seem to be a special characteristic of this early cult in Crete where the intaglio itself was found. The component elements of this sacral type are the central baetylic column and an altar slab placed upon it with four smaller legs to support it at the corners. In the field above is seen a rayed sun.

Like the tree pillar with its heraldic supporters, the Lions' Gate scheme



FIG. 41.—CONFRONTED LIONS WITH FORE-FEET ON BAETYLIC BASE, LENTOID, CRETE (?).

with its central architectural column or altar base shows very distinct analogies to some of the Cypriote types, the central feature of which is the rayed symbolic column. The parallelism becomes still closer when we find, in both cases, lions, Griffins and Sphinxes among the most frequent guardians or supporters of the divine pillar, though in Mycenaean Cyprus they are also depicted as actually adoring the aniconic image. It has been shown above that in the case of the Cypriote cylinders the attendant

¹ Furtwangler u. Loeschke, *Myk. Vasen*, Pl. E, 11; Furtw., *Geschnittene Steine* (Berlin Cat.) Pl. I. 34; P. et C. vi Pl. XVI. 11:

H.S.—VOL. XXI.

Furtw., *Ant. Gamm.*, Pl. III. 22. The stone is a dark red steatite.

² See above p. 116 *seqq.*

monsters and, to a certain extent, the symbolic column itself, are taken from an Egyptian solar cycle, and the inference has been drawn that the aniconic pillars among the Mycenaeans of Cyprus were identified with divinities having some points in common with the Sun-Gods Ra, or Horus, and Hathor, the Great Mother.

The rayed sun which in Fig. 41 appears in the field above the confronted lions, certainly corroborates the view that in the Aegean countries the aniconic pillars, which appear in a similar conjunction, were also connected with solar divinities. The pillar here indeed is, as already noted, of a purely indigenous shape, and cannot itself, like the symbolic Cyprian types with their reminiscences of palmette capitals and Hathoric scrolls, be directly traced to an Egyptian prototype. The Nilotic connexion has nevertheless left its traces in these Mycenaean types. We recall the frequent appearance in Egyptian religious art of opposed figures in special association with the solar symbols and pillars of the sun. Thus we see the squatting, confronted figures of Ra with his hawk's head and Ma with her feather crest on either side of the Sun-God's obelisk, and in

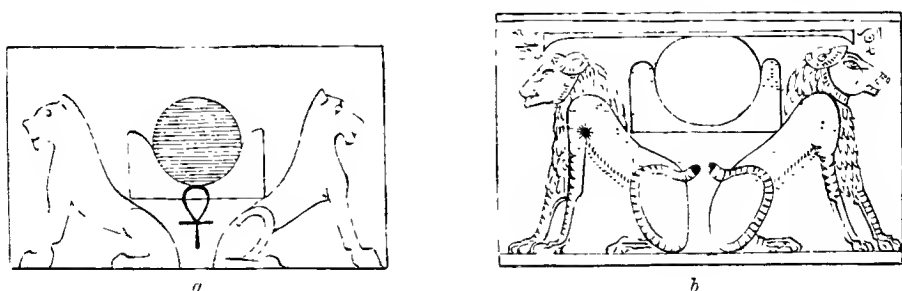


FIG. 42*a*, *b*.—LION SUPPORTERS OF EGYPTIAN SOLAR DISK.

other cases the figure of the sun's disk on the horizon is supported by two lions seated back to back (Fig. 42*a* and *b*). To a certain extent the Lions' Gate scheme may itself be regarded as a combination of these two types. The column on the altar is a free indigenous translation of the obelisk rising on its base which really represents the 'Mastaba' or sepulchral chapel. The back to back position of the two lions is literally reproduced in Figs. 39 and 40, and where, as in Figs. 37 and 41, the bodies of the lions are turned towards the central pillar, their heads are averted as if in deference to the same religious tradition. The monsters here are not so much simply adorants as on the Cyprian cylinders, and therefore regarding the sacred pillar, but are guardians looking out and away from it for possible enemies. On the Lions' Gate itself they naturally look forward along the avenue of approach.

It must, in fact, be clearly recognised that the scheme of the pillar and guardian monsters as it appears in Mycenaean art on the Lions' Gate and in other kindred designs is, like the Griffins and Sphinxes that often form part of it, essentially of Egyptian derivation. It is translated into

indigenous terms and applies, doubtless, to indigenous divinities, but it is reasonable to suspect in the latter some points of resemblance to the divinities of light with which the parallel religious types seem to have been specially associated in the Nile valley.

§ 22.—*Anthropomorphic Figures of Divinities substituted for the Baetylic Column in the Lions' Gate Scheme.*

Attention has been called above to the Mycenaean practice, in depicting religious scenes, of supplementing the design of the sacred tree or pillar that formed the material object of the cult by placing beside it a figure of the divinity itself as visible to the mind's eye of the worshippers. The



FIG. 43 —MALE DIVINITY BETWEEN LIONS ON LENTOID GEM, KYDONIA, CRETE (?)

God or Goddess is seen in actual converse beneath the holy tree, seated beside or even on the shrine, or even at times in the act of descending beside the altar block, or in front of the pillar image. It has been remarked above that this pictorial expedient of religious art must be regarded as symptomatic of a process of transition in the rendering of the aniconic idol itself, which in the succeeding historic period was gradually moulded into anthropomorphic form.

But besides this supplementary representation of the divinity side by side with its tree or pillar shape there is evidence of another method of satisfying the realistic cravings of a more advanced religious stage. This is the actual substitution of the God or Goddess in human guise in the place of the aniconic image. It is possible, for instance in the case of the Lions' Gate scheme, to give a series of examples in which a divinity is introduced

between the lion supporters in place of the column. We have here in fact, pictorially anticipated, a religious grouping which later, as will be seen from certain types of Apollo, Kybelê and the Asiatic Artemis, attached itself to the cult images.

These religious schemes in which the divinity simply replaces the pillar must be distinguished from some other designs, also exemplified by Mycenaean signets, bearing a certain superficial resemblance to them, in which a male hero is seen in the act of grappling with a pair of lions. These have another origin and should more probably be regarded as adaptations of the familiar Chaldaean type of Gilgames. Sometimes as in the design on a gold signet ring we see two heroes engaged in the same struggle,¹ a scene also taken from the Babylonian repertory.

But a very different impression is given by the type on an unpublished Mycenaean gem (Fig. 43),² discovered in the immediate neighbourhood of

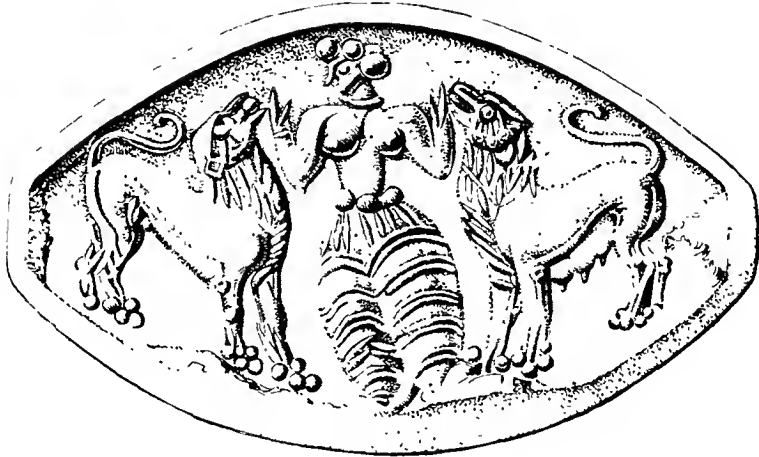


FIG. 44.—FEMALE DIVINITY BETWEEN LIONS ON AMYGDALOID GEM, MYCENAE (7).

Canea, on or near the site of the ancient Kydonia. Here we see a male figure, his arms symmetrically extended, with two lions heraldically opposed on either side. The stiff upright figure here with the legs together is an almost perfect substitute for the central column, and the horizontally extended arms directly suggest the entablature of the Lions' Gate scheme. It is in fact the literal translation of the pillar image into human shape.

A variant of this design in which the standing figure grasps the two lion supporters by the necks is seen on a serpentine lentoid, unfortunately much damaged by fire, which was found in one of the Greek islands.³ In this case

¹ In the Museum at Péronne.

² In the Berlin Museum. Furtw., *Geschn*

³ A white agate lentoid; in my collection. *Steine*, No. 9.
Found in 1894.

the forelegs of the lions rest on two bases, a feature which brings the scheme into the closest relation with that of the Lions' Gate.

The central figure also appears in female form. On a fine agate gem recently found at Mycenae (Fig. 44)¹ a Goddess is seen in the usual costume holding up her two hands in an evenly balanced attitude between a lion and a lioness. Another intaglio (Fig. 45),² on a lentoid of pale yellow cornelian which forms the bezel of a gold ring, shows the Goddess seated on a lion's head, while on either side of her two lions are heraldically posed looking backwards. It will be seen that the attitude of the lions is directly borrowed from the aniconic scheme in which they rest their feet on an altar or small pillar, while the Goddess herself is represented armless and in an unusual sack-like costume as if something of her columnar form still affected the artist's imagination.

It will be noticed that these figures of the Goddess between her lion



FIG. 45.—SEATED GODDESS BETWEEN LIONS ON LENTOID RING-STONE (?).

supporters supply almost exact parallels, though of a considerably earlier date, and in a purely Mycenaean style, to a well-known Phrygian monument which has hitherto afforded the best illustration of the religious conception underlying the original tympanum relief.

In Phrygia, where the tradition of the Mycenaean scheme seems to have been long maintained in the tympanum groups above the rock-hewn tombs,

¹ In my collection.

² From the collection of the late Sir Wollaston Franks, to whose kindness was due the cast from which Fig. 45 was drawn. The ring is now with the rest of his collection in the British Museum. It was originally in the

hands of a Swiss collector, but the provenience is unknown. From the style of cutting it is probably of Cretan fabric, and in support of this view it may be mentioned that pale yellow cornelians of the same class are common in a rough state in Eastern Crete.

the frequent design of the lions on either side of a column¹ is replaced inside a sepulchral chamber described by Professor Ramsay at Arslan Kaia by two lions or lionesses in the usual heraldic attitude on either side of a rude image of Kybelê.² It is, in fact, little more than the earlier columnar form of the Goddess slightly hewn,³ and we here see the cult image coming as it were to life and first putting on a human shape.

A distinction must indeed be observed between the two cases. The Phrygian image belongs to a much later date and represents the partial anthropomorphization of the actual cult pillar, a stage of which in still later, Greco-Roman days the Syrian and Anatolian shrines supply so many examples. The figures on the Mycenaean gems, on the other hand, must be rather regarded as the purely pictorial impersonation of the Goddess as seen by the eye of faith. It may be, as suggested above, that the columnar cult shape had, to a certain extent, influenced the pictorial representation in the last mentioned design with the seated Goddess. On the whole, however, the figure is distinctly human, the feet are given as well as the head, the curves of the seated body and the flounced raiment below. There is nothing here resembling the very imperfect anthropomorphization of the pillar idol that we find in the relief of Arslan Kaia. The one is an anthropomorphic figure of the Goddess slightly affected by the columnar cult image, the other is a pillar image slightly modified by the anthropomorphic ideal form. With the Mycenaean, as clearly pointed out, all the evidence goes to show that the cult-image itself was still a simple pillar or sacred stone.

The divine figure on these Mycenaean gems is truly a Lion Goddess, closely analogous, at any rate, to the Mother Kybelê—*Matar Kubile*—of the Phrygian monument. The attitude of the lions indeed in the last example placing their forepaws upon the seated figure of the Goddess corresponds with that which at a much later date than the Arslan Kaia monument continued to be associated with Kybelê and Rhea.

On the cylinder seals of the Cypro-Mycenaean class there is also evidence of a Lion Goddess. On an example from Salamis a seated female divinity holds in her left hand a bird, perhaps a dove, and places her right on a low pillar, representing her baetylic form, behind which is a rampant lion who, resting one paw on the pillar-idol, raises the other in the act of adoration. Lions in the schematic pose of adorants or guardians appear before several of the sacred pillars on these Cyprian cylinders which in some cases at least may

¹ See W. M. Ramsay, *Journ. Hellen. Stud.* vol. iii. p. 18 *seqq.* and Plates XVIII., XIX. One group is thus described *loc. cit.* p. 19. 'Over the door is carved an obelisk. On each side of the obelisk a large lion is carved in low relief rampant with its fore-paw on the top of the door.' In this case there was a little cub below each of the lions.

² *Journ. Hellen. Stud.* vol. v. (1884), pp. 244, 245.

³ The true import of this figure was first pointed out by M. Salomon Reinach, 'Mirage Orientale' (*Anthropologie*, iv. 1893, p. 705). M. Reinach justly observes 'cette déesse tient la place de la colonne de Mycènes qui appartient au stage *uniconique* de la civilisation grecque: le monument où l'anthropomorphisme se fait jour est certainement le plus récent des deux.'

be taken to represent the same Goddess. In the case of these Cypriote types we are led from the associated symbols to seek a celestial divinity who, if on the Hellenic side of her being she approaches Dionê, has certain attributes in common with the Egyptian Hathor. It is possible that both in Asia Minor and in prehistoric Greece equally with Mycenaean Cyprus the lion cult may have passed to the 'Great Mother' of the indigenous religions, owing to the near relation in which Hathor the 'Great Mother' of Egyptian cult stood to the Sun-God who was there the special Lord of Lions. In considering the religious subjects on the Cypro-Mycenaean cylinders we shall see to what a large extent the cult of Hathor left its impress on that of the Mycenaean colonists, and the same influence is clearly traceable on the contemporary 'Hittite' art of Anatolia. It would even appear that the turret or mural crown common to the Asiatic Goddess in her several forms is the direct derivative of the 'House of Hor' on the head of Hathor. Kybelê too was a 'Virgo Caelestis,' with sun or moon for her attributes—Mother according to one tradition of Hêlios and Selênê,¹ just as the closely allied Hellenic Rhea is made the Mother of the Cretan Light-God known to the Greeks as Zeus. Her title of Basileia as 'Queen of Heaven' recalls the title of Fanassa applied in Cyprus to Dionê or Aphrodîtê Urania. Finally the Phrygian Kybelê is the special protectress of cities. The Mycenaean column supports the roof-beams; in her mural crown the Mother Goddess supports the city itself. So far at least as Mycenae itself was concerned, no more appropriate tutelary image could have been found for its citadel gate. As the special patroness of the Tantalidae Kybelê would have been the natural protectress of the city of Pelops, Atreus and Agamemnon.²

But, as we have seen, the pillar image between the lions also takes a male form. Moreover, the lion guardians of Egyptian religious art, which, as has already been shown, in reality supplied the starting-point for this very scheme, are bound up with the cult of the male solar divinities Ra and Horus.

The alternative substitution of a male and female divinity for the pillar image of the Lions' Gate scheme recalls a feature in this early aniconic cult to which attention has already been drawn. It is highly probable that the same pillar could in fact become by turns the material dwelling-place of either member of a divine pair. At Paphos, for instance, it could represent either Aphrodîtê or Aphroditos. The Semitic religious notions,—which may well have had a much wider extension—according to which what is practically the same divine being can present either a male or a female aspect, fitted in admirably with this ancient pillar cult. But in the case of the Lions' Gate itself and of one of the engraved seal-stones cited above, there is a feature which strongly confirms the idea that the column in this case served as the

¹ Diodôros, l. iii. c. 57.

² Pausanias (iii. 22, 4) mentions a temple and image of Mother Goddess at Akraia in Lakonia, said to be the most ancient shrine of the kind in the Peloponnese, though he adds that the Magnesians, to the north of Sipylos,

claim that on Κοῦδίου πέτρα to be the oldest of all and the work of Broteas the son of Tantalos. The special connexion of the cult with the Tantalidae makes its appearance at Mycenae the more probable.

common baetylic materialisation of a pair of divinities. The column of the tympanum is supported by two altar bases, suggestive of a double dedication. Again, on the engraved stone from one of the Greek islands, described above each of the lions on either side of the male figure places his feet on a separate base, which may be taken to show that they too were the sacred animals of a divine pair. If the lion belonged to Kybelê and Rhea, it is also the sacred animal of the Sun-God with which, under variant names and in various relations, these two divinities are coupled. It is probable that in Mycenaean religion, as in the later Phrygian, the female aspect of divinity predominated, fitting on as it seems to have done to the primitive matriarchal system. The male divinity is not so much the consort as the son or youthful favourite. The relationship is rather that of Rhea than of Hera to Zeus, of Adonis rather than of Arês to Aphroditê. In this connexion it is a noteworthy fact that the great majority of the votaries and adorants in the Mycenaean cult scenes are female figures, and in some cases the Goddess that they attend or worship is visible in anthropomorphic form. In other scenes of a similar nature, where apparently divinities of both sexes are represented, the God is either in the background as on the great Akropolis ring,¹ or holds a secondary place as when he approaches a seated Goddess.²

§ 23. *The Mycenaean Daemons in similar Heraldic Schemes.*

An interesting parallel to the substitution of anthropomorphic figures of divinities for the baetylic column between its animal supporters is



FIG. 46.—DAEMON BETWEEN LIONS,
LENTOID, MYCENAE.

supplied by a gem recently discovered by Dr. Tsuntas in a tomb of the Lower Town of Mycenae.³ In this design (Fig. 46) a Mycenaean daemon of the usual type takes the place of the divinity between two lions whose front legs rest on what appear to be two altar bases with incurving sides. On the well known lentoid stone said (probably erroneously) to have been found at Corneto or Orvieto⁴ we see the converse of this design, in which an anthropomorphic figure stands between two ewer holding daemons. On the glass paste reliefs, of which illus-

¹ Fig. 4 above, p. 108.

² See Fig. 51 below.

³ Thanks to the kindness of Dr. Tsuntas I am able here to reproduce this interesting and hitherto unpublished type.

⁴ *Annali dell' Istituto*, 1885, Pl. GH.;

Cook, 'Animal Worship,' *J.H.S.* xiv. (1894) p. 120; Helbig, *Question Mycénienne*, p. 37 (325) Fig. 24; Furtwangler, *Ant. Gemmen*, iii. p. 37 Fig. 16 and p. 38 note, where the alleged provenience is with reason called in question.

trations are given above,¹ we see this anthropomorphic figure replaced between the same daemonic attendants, in the one case by a square pillar in the other by a columnar tripod. We have here an additional example of the alternation of the divinity and the pillar image.

It is impossible in this place to enter on a detailed discussion as to the true interpretation of these strange Mycenaean daemons. It must be sufficient here to give strong expression to the belief that the explanation first suggested by Dr. Winter, is in the main the true one, and that they represent a Mycenaean adaptation of an Egyptian hippopotamus Goddess.² The head of the river horse has been assimilated to that of the lion, and the whole design including the dorsal mane and appendage has been crossed with the type of the hippocampus, already familiar in Crete on seals of the prae-Mycenaean period. The frequent use of this Nilotic type in these heraldic schemes of the Lions' Gate class is an additional corroboration of the view already expressed, that the pillar image with animal supporters finds its true origin in Egyptian religious art. The female hippopotamus Ririt, the image of a constellation standing in connexion with the 'Haunch,' our 'Charles' Wain,³ is the fitting companion of the solar lions, griffins, sphinxes, and krio-sphinxes which we have already recognised among the supporters of the Mycenaean pillar images.

§ 24.—A Mycenaean 'Bethshemesh.'

Among the scenes of adoration of pillars, rayed or otherwise, on Cypro-Mycenaean cylinders, referred to in section 18, we not unfrequently find two such pillars introduced, indicating the dual cult of two associated divinities. A good example of this dual cult from Salamis is given in Fig. 47.⁴ Here we see two pillars, the taller of which is rayed, while the other has a very well-marked dividing slab between its upper and lower members. These pillars are associated with two female votaries holding respectively a goat and an ibex, while the orb and crescent signs and the bovine head in the field above point to a combination of solar and lunar divinities. It is natural to infer that these pillars represent severally a God and a Goddess and in this case the rays seem clearly to distinguish the solar member of this

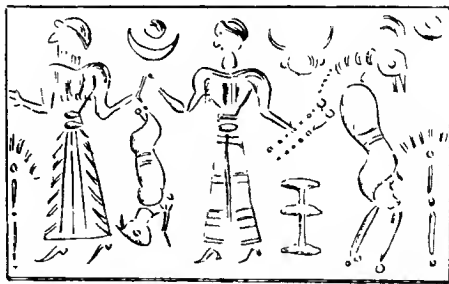


FIG. 47.—DUAL PILLAR WORSHIP ON CYPRO-MYCENAEAN CYLINDER ($\frac{2}{3}$)

¹ P. 117. Figs. 13, 14.

² Dr. Winter compares Thueris. As noticed below, her counterpart or double the stellar Ririt has perhaps a better claim.

³ See Maspero, *Dawn of Civilisation* (Engl. Ed.), p. 94.

⁴ Cesnola, *Salamina*, Pl. XIII. No. 29. The material is haematite.

divine pair. An interesting parallel to this dual cult is presented by a gold signet ring, procured by me some years since from the site of Knossos, which has already been referred to by anticipation as supplying evidence of exceptional value regarding the aniconic cult of the Mycenaean world.

The signet ring from the site of Knossos is of a typical Mycenaean form, with a long oval bezel, set at right angles to the hoop. It is slightly worn, but the details of the design are still clearly displayed (Fig. 48). To the extreme left of the field, as it appears in the impression, is seen a rocky steep with plants or small trees growing on it, which may be taken to show that the scene is laid in a mountainous locality. Immediately in front of this is a female figure in the flounced Mycenaean dress and with traces of long tresses falling down her back. She stands on a stone platform which reminds one of the supporting terraces that form the emplacement of buildings in so

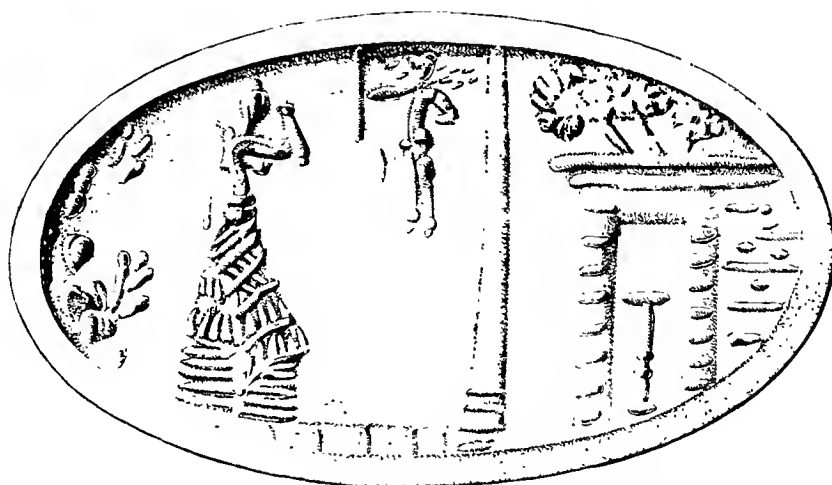


FIG. 48.—DUAL PILLAR WORSHIP ON GOLD SIGNET RING FROM KNOSSES (?).

many of the prehistoric hill cities of Crete. In this case no doubt we have to do with an open court, the boundary on one side of which is the terrace wall, on the other steep rocks—a kind of outer *temenos* of a sanctuary. This stone base recurs beneath the cult scenes upon several Mycenaean rings to be described below.

The female figure who stands here raises her hand in the familiar attitude of adoration before an obelisk-like pillar, in front of which descends another small figure, the male sex of which is clearly indicated. This male divinity—for so we may venture to call it—holds forth what appears to be a spear in an attitude which recalls the small figure that hovers above the group on the gold ring, already referred to, from the Akropolis Treasure of Mycenae. In the present case, however, the characteristic shield which covers the body of the figure is wanting. The God is entirely nude, and from his shoulders shoot forth what must certainly be regarded as rays

rather than wings. To the significance of this feature there will be occasion to return.

Behind the tall obelisk, which shows four rings towards its base, is the gate of a walled enclosure or hypaethral sanctuary, beneath which is seen a second smaller column, consisting of a shaft with a central division, and a capital and base. Above the cornice of the walls rise the branches of a group of sacred trees, with what appear to be triply divided leaves like those of a fig-tree, and perhaps fruit. The little dots on the walls of the shrine, arranged in alternating rows, indicate an attempt to represent isodomic masonry.

Apart from the narrower field of comparisons into which this interesting design leads us, its broader anthropological aspects stand clearly revealed. It is a scene of stone or 'baetyl' worship, also partly associated with the cult of trees. We are here already past that more primitive stage of the religion so well illustrated, for example, among the Melanesians, in which any stone or rock that strikes a man's fancy may become the local habitation of a ghost or spirit. On the Knossian ring we see stone pillars of an artificial kind, and belonging to a more formalised worship, though still essentially of the same class. The obelisk, here, is literally, as in the case of the Beth-el set up by Jacob, 'God's house,' and the God is seen actually in the act of being brought down by the ritual incantation of his votary to his earthly tenement of stone.

The obelisk with the God descending before it is only one of a pair of sacred pillars contained in the same cult scene. It represents the male form of the aniconic image, and to the character of its divine attributes we shall have occasion to return. The second and lower column, standing apparently in the doorway of the hypaethral shrine, possibly, however, intended to be looked on as set up within its enclosure, may with great probability be regarded as a female form of divinity, or, at any rate, a deity in which the female aspect preponderated.

We are struck, in the first place, by the interesting parallel between the position of the pillar under the gate, and that of the aniconic image of the Paphian Aphrodite on much later monuments. Considering the many centuries that had elapsed between the date when this Mycenaean ring was engraved, and the earliest representations of the Paphian shrine that have come down to us, some divergence in the outline of the stone might naturally be expected. The columnar form of the Mycenaean type has been softened perhaps by the contamination of oriental examples, into a conical outline. But Cypriote cylinders of Mycenaean date show that in fact a form of aniconic image was at that time in vogue in the island, absolutely identical with that on our ring.

The distinguishing features of the pillar visible in the doorway on the Knossian ring are the broad base and capital, and a double swelling at the centre, which divides the shaft into two. In this respect we have before us a close parallel to the double pillars, rayed, or otherwise, on the Cyprian Mycenaean cylinders described in the preceding section.

A further highly interesting point of comparison is supplied by the fact that in the Mycenaean seals of Cyprus, as on the Knossian ring, this divided pillar makes its appearance as one of a pair. In the example already given in Fig. 47, a short pillar with a central division and having above it a bovine head, is associated with another higher column, from the summit of which issue rays. The pillars are here attended by flounced votaries like that of the Cretan signet, and the combined symbol of the orb and crescent sufficiently reveals the character of the cult. The bovine head above the shorter pillar in this case probably indicates a lunar connexion.

It can hardly be doubted, indeed, that in the case of the Cypriote examples the female divinity, thus represented in aniconic form, is to be identified with the Goddess whose cult was in later times specially connected with Paphos. The various associations in which the stone pillar and the votaries associated with it appear on the cylinders clearly betray her true character. The star and crescent,¹ the rays which generally issue from the stone itself, point to her in her character of a luminary of the heavens, Aphroditê Urania. In one case the same figure of a lion in the attitude of adoration that is seen on other cylinders before the rayed pillar² stands behind the Goddess herself, who is here seated on a throne in her character of Fanassa, and holds a dove in her hand.³ The cult of Aphroditê under the name of Ariadnê was also known in Cyprus and it is in this Cretan form that we should most naturally recognise the female consort of the warrior Light-God on the Knossian signet.

On another Cyprian stone—a rectangular bead or ‘tabloid’ of steatite⁴—we find the same conjunction of the double form of the stone pillar (Fig. 49). On one side is a divided column, in this case rayed above, which evidently corresponds to the female divinity. On the other side is a more obelisk-like column on a double pedestal with rays issuing on every side, which shows distinct points of affinity with the obelisk on the Knossian ring, and here, too, we may infer that it answers to the male member of a divine pair. On a parallel bead-seal the double rayed column of the female divinity is coupled on the reverse side with a rayed orb in place of the obelisk. The solar attribution could not be more clearly indicated.

In the Cypro-Mycenaean versions of the male pillar we see it surmounted by a halo of rays. On the Cretan signet ring the same element is supplied by the rays that issue from the shoulders of the descending God. There can be little doubt that this method of expressing the luminous character of the divinity was borrowed from an oriental source. Samas, the Babylonian Sun-God, the Canaanite form of whose name appears as Shemesh, was habitually represented with rays issuing from his shoulders. In the

¹ In the cylinder given in *Salamina*, Pl. XII. No. 8 the star and crescent are seen above the luminous pillar.

² *Salamina*, Pl. XII. Nos. 7 and 8. Sometimes the adoring animal is a griffin (*op. cit.*

Pl. XII. No. 5); in one case it has a horse's mane (Pl. XII. No. 6).

³ *Op. cit.* Pl. XII. No. 14.

⁴ *Salamina*, p. 145, Fig. 138.

obeliskoid pillar of the Cretan ring we have, in fact, a Mycenaean Beth-shemesh, the material place of indwelling for the solar deity that we see here descending upon it, as Beth-el was of the God of Jacob.

The obeliskoid form may itself be regarded as another trace of Egyptian influence on the externals of Mycenaean cult. It is worth remarking that this earlier aspect of the Sun-God as a pyramidal pillar clung in later Greece with great persistence to the cult of Apollo. In the well-known instance of the omphalos at Delphi, the stone, though a lower cone, is probably a variant of the same obelisk-like type. Perhaps, however, the most literal survivals of this form were due to the conservative cult of north-western Greece. On the coins of Ambrakia, of the Illyrian Apollonia and Orikos the obelisk of Apollo appears in a form practically identical with that found on the Cypriote tabloid (Fig. 49) and the Knossian ring. Here, as there, moreover, the elongated upper part of the stone rests on a distinct base, with two or three divisions as in the latter example. May we, perhaps, go a step further in these cases and regard the solar divinity, who is the object of this aniconic cult in Epirus and its borderlands, as a differentiated offshoot of a warrior God, one part of whose being is preserved in the later conception of Zeus? It is certain that at Ambrakia the type is associated with the head of

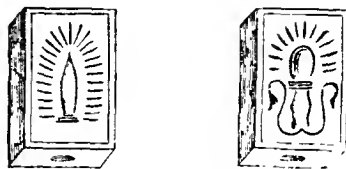


FIG. 49.—DOUBLE REPRESENTATION OF RAYED PILLARS, ON TABLOID BEAD-SEAL, OLD SALAMIS.

Dionê, the consort of the Pelasgian Zeus. At Amyklæ we see the still partly aniconic image of the prae-Dorian Sun-God associated with a similar form of a Goddess known as the armed Aphroditê, who, on her Hellenic side, is indistinguishable from Dionê. On the other hand, the Arcadian Zeus Lykaïos is himself the 'God of Light.' In Crete, where this luminous aspect of Zeus is particularly strong, Dionê appears as the 'Mother' of Pasiphaê, the personification of the full moon.

The ancient Light-God of Crete and Arcadia may not improbably turn out to be a deity belonging to the earlier prae-Hellenic population, taken over by later Greek occupants of the country. It is possible that these religious traditions are a survival of a time when, as the Cretan evidence so strongly indicates,¹ a common element had a footing on both the Libyan and Aegean shores. Such a connexion would best explain the deep underlying influence of Egyptian solar cult which our researches so continually encounter. The fact that in one place this Light-God is identified with Apollo, in another with a form of Zeus, of Dionysos, or of Ares, may certainly be regarded as a symptom of adaptation from a foreign source. The true Hellenic Zeus was rather the personification of the luminous sky, and Dionê as she appears in her oldest Epirote home is simply his female form. The fusion of the

¹ See 'Further Discoveries of Cretan and Aegean Script: with Proto-Egyptian and Libyan Comparisons,' *J.H.S.* xvii, 1897.

Hellenic Zeus with a divinity representing Mentu Ra, the warrior Sun-God of Egypt, would naturally favour the assimilation of the female aspect of both divinities, of Dionê namely and Hathor.

On the ring from Knossos this warrior Sun-God is armed with a spear or javelin—an archaic trait preserved by the Amyklaean Apollo and the solar Ares of Thrace. Elsewhere on the great signet ring from Mycenae



FIG. 50.—RAYED SHIELD-BEARING GOD ON PAINTED SARCOPHAGUS, MILATO, CRETE.

and the painted tablet we see a descending armed divinity holding a large S-shaped body-shield. An interesting piece of Cretan evidence tends to show that this Mycenaean shield could on occasion be equally associated with the primitive Light-God of the Knossos signet. In a chambered tomb at Milato in Crete, the mother-city of the better known Miletos, excavated

by me in 1899, was a painted clay ossuary chest or larnax of the usual Cretan type,—copied, it may be observed, from the wooden chests of contemporary Egypt,—one end of which presented a male figure that must certainly be regarded as a divinity (Fig. 50). With one hand the God holds out a large body-shield of the usual type and from his neck, in this case, immediately above the shoulders issue undulating lines which seem to be the equivalent of the rays of the Knossian divinity and still more nearly of the wavy lines that issue from the shoulders of the Babylonian Samas. It does not appear that he holds anything in the other hand.

§ 25.—*Cult Scenes relating to a Warrior God and his Consort.*

The alternative appearances of the rayed solar God of the Knossian ring or the Milato sarcophagus holding out in the one case a spear, in the other the Mycenaean body-shield, render almost inevitable the comparison of these



FIG. 51.—ARMED GOD AND SEATED GODDESS ON ELECTRUM SIGNET RING, MYCENAE.

Cretan types with the descending armed figure on the great signet-ring of Mycenae. In that case, as has been already pointed out,¹ the material form of the divinity is probably to be recognised in the double axe that fills the field between the descending warrior God and his seated consort. As already noted, the 'labrys' symbol of the Cretan and Carian Zeus, coupled with the sun and moon above, sufficiently define the character of the divine pair here represented. The poppies—emblem of sleep and the oriental *kúf*—held by the seated Goddess, were in later times generally an attribute of Demeter, but at Sikyon also of Aphroditê.² It has been already suggested that, whatever name may have originally belonged to the Goddess of the Mycenaean cult-scenes, whether in Cyprus or Greece proper, a part of her mythic being survived in that of the Goddess who in Crete is best known by her epithet, Ariadnê.³

¹ See above, p. 107 *seqq.*

² The Aphrodite of Kanachos at Sikyon held poppies in one hand and an apple in the

other, Paus. ii. 10, 5. Cf. Furtwangler, *Myk. Vasen*, p. 79, and *Antike Gemmen*, p. 36.

³ Hesych. ἀδρόν, ἀγρόν, Κρηταις. The form

On an electrum signet ring from a tomb of the Lower Town of Mycenae,¹ opened by Dr. Tsuntas in 1893, we may also with great probability recognise the same divine pair (Fig. 51). The Goddess is here seated with her back to a bush upon what may be variously interpreted as a simple seat or a small shrine. The male divinity here stands naked, except for his girdle and anklets, and armed with a spear or javelin. His left² forearm is bent forward and crosses that of the Goddess in the same position,³ and the figures of both divinities express the same significant gesture in which a forefinger and thumb are pressed together. This is a very widespread expedient of sign-language for indicating agreement, and to the modern Neapolitan still conveys the idea of plighted troth.⁴

Two other signet rings remain to be described which afford some striking points of comparison with that from the Akropolis Treasure of Mycenae. One of these (Fig. 52)⁵ was found in the Vapheio tomb near Sparta. The other (Fig. 53)⁶ was procured by Dr. Tsuntas in 1895 from a tomb in the lower town of Mycenae. Both designs present such an obvious parallelism in their general composition that they may best be described together.



FIG. 52.—RELIGIOUS SCENE ON GOLD SILET RING FROM VAPHEIO TOMB (1).

On the Vapheio ring (Fig. 52) we see a female figure, here probably to be identified with the seated Goddess on Schlie-

¹ *Ἀριστεύη* also appears on vases, O. Jahn, *Enchiridion d. Vasculunde*, etc.: C.I.G. 7441, 7692. Cf. Stoll, Art. 'Ariadne' in Roscher's *Lexikon*.

² Fig. 51 is drawn from a cast kindly supplied me by Dr. Tsuntas shortly after its discovery. The ring is described in Tsuntas and Manatt, *Mycenaean Age*, p. 172. It has since been reproduced by Furtwangler, *Antike Gemmen*, III, p. 36, Fig. 14 and by H. von Fritze, *Strena Hellenica*, p. 73, 6.

³ Here as elsewhere the designs are described as they appear in the impression.

⁴ As far as I am able to judge from a minute examination of the engraving, the hand of the male figure is not, as interpreted by Dr. Furtwangler (*Antike Gemmen*, p. 36), grasping the Goddess's wrist but simply repeats the same gesture. According to Dr. Furtwangler's interpretation of the action it is the well known symbolic gesture *χεῖρὸς ἐπὶ κατὰ* for the leading home of a bride.

It will be seen that the alternative explanation offered below does not essentially differ in its general significance.

⁵ See Garrick Mallery, 'Sign Language among the North American Indians compared with that among other peoples and with Deaf Mutes' (*Annual Report of the Bureau of Ethnology*, Washington, 1, 1881), p. 286, Figs. 61 and 62, and Fig. 81 from De Jorio, *La Mimica degli Antichi investigata nel Gestic Napoletano* (Naples, 1832).

⁶ Tsuntas, *Ἐφ. Ἀρχ.*, 1889, Pl. X, 39, and p. 170; Tsuntas and Manatt, *Myc. Age*, p. 225; Perrot et Chipiez, *L'Art* etc., vi, p. 847, Fig. 431. Reichel, *Hom. Wapfen*, p. 6, Fig. 4; Furtwangler, *Ant. Gemmen*, Pl. II, 19, and vol. II, 9; Fritze, *Strena Hellenica*, p. 73, Fig. 7.

⁷ Furtwangler, *Ant. Gemmen*, Pl. VI, 3 and vol. II, p. 25. Fritze, *op. cit.*, p. 71 Fig. 7.

mann's ring, who stands beneath the overhanging branches of a fruit tree at the foot of which appears to be a stone pillar,¹ the reduplicated version of divinity. Rocks below indicate that this is on a height, and a male figure, naked except for his sandals and gaiter-like foot gear and the usual loin-cloth and girdle, is seen in an energetic attitude either plucking the fruit for the Goddess from her own tree or pulling down the branch for her to gather it from. On Schliemann's ring a small female attendant behind the tree is seen engaged in plucking fruit for the same purpose.

On the recently discovered ring from Mycenae (Fig. 53) this part of the scene is reproduced with some variations in detail but with great general correspondence. The whole group is here placed on a stone base or terrace recalling that of the Knossian ring (Fig. 48), but here apparently of ruder and smaller masonry. Here a flounced figure answering apparently to the Goddess on the Vapheio ring stands with her hands drawn towards her waist.

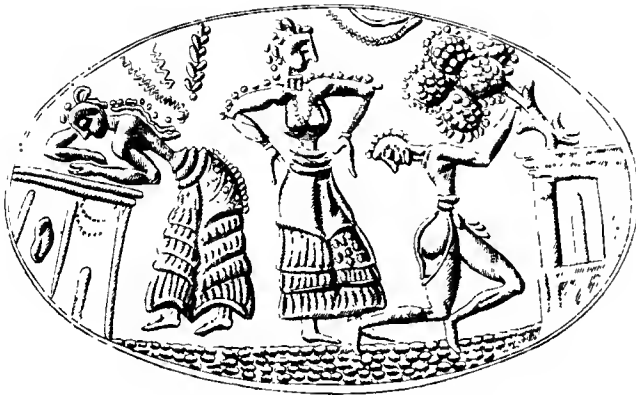


FIG. 53.—RELIGIOUS SCENE ON GOLD SIGNET RING FROM MYCENAE (†).

The broader features of sign-language are very universal in their application and in this case a common gesture for hunger among the American Indians may supply a useful parallel. It is made by passing the hands towards and backward from the sides of the body, denoting a gnawing sensation,² and the pictograph for this sign curiously recalls the attitude of the figure on the ring. This explanation is quite appropriate to the subject. The Goddess here is seen looking towards the fruit-laden boughs of her sacred tree while a male attendant, in the same energetic attitude as the similar figure on the ring from Mycenae, hastens to satisfy her desire by pulling down a branch of

¹ This tree has been described by Tsmatas, *Εφ. Ἀρχ.*, 1890, p. 170, as growing out of a large vessel (ὡσεὶ ἀπὸ ἀγγείου ἐπιμήκους ἐκφυόμενον), but a comparison with the parallel ring from Mycenae (Fig. 53) inclines me to believe that the object below, though certainly tub-like, is a somewhat thick

column

² Garrick Mallery, 'Pictographs of the North American Indians,' *Fourth Annual Report of the Bureau of Ethnology*, 1886, p. 236, and cf. Fig. 155, p. 235, representing the celebrated rock-painting on the Tule River, California.

the tree. The designs on both rings, which have been hitherto described as scenes of an orgiastic dance, are in fact full of meaning and depict an act of divine communion—the partaking by the Goddess of the fruit of her sacred tree. In this case as in the other the tree is in immediate association with a sacred pillar, here seen in its shrine. The tree seems to spread from the top of a small sanctuary raised on a high base and displaying an entablature supported by two columns, in the opening between which, but not reaching as far as the impost, is seen the pillar form of the divinity. Probably as in the case of the Knossian ring which supplies a somewhat similar effect the tree must really be regarded as also standing within the shrine or *temenos*.

In the field above to the right of the central figure on the Vaphio ring, together with two uncertain objects, one of which may be a spray or an ear of barley, there appears a device of symbolic significance.

This object (Fig. 54, 5) is described by Dr. Tsuntas as a cross-like axe with two appendages while Dr. Max Meyer speaks of it simply as a double-axe.¹ It will, however, be observed that the lower extremity terminates in

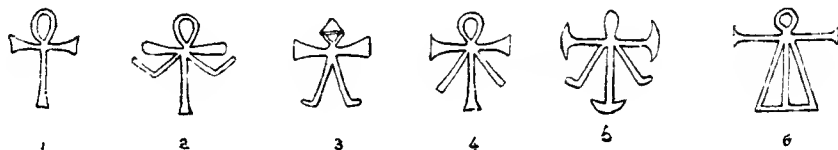


FIG. 54.—SYMBOLS DERIVED FROM THE EGYPTIAN *Ankh*. 1. The *Ankh*. 2. Two-armed Egyptian Form. 3 and 4. Hittite Types. 5. From Mycenaean Ring. 6. On Carthaginian Stele.

the same way as the two side limbs and that in neither case is there any true delineation of an axe—though the curving edges may not improbably be due to some cross influence from the double-axe symbol.

For the true meaning and derivation of the present figure we must look on the Hittite side. It is in fact unquestionably allied to a modification of the Egyptian *Ankh* or symbol of life and divinity (Fig. 54, 1) which effected itself in the 'Hittite' regions of Anatolia and Northern Syria. Already on a cylinder of rather early Chaldaean type, but probably belonging to that region, the *Ankh* is seen in its Egyptian form as a symbol of divinity behind the hand of a seated God.² Somewhat later it becomes of frequent occurrence in cult-scenes and is also an accompaniment of Hittite princes.³ Already in some versions of the *Ankh* belonging to the earliest dynasties of Egypt, it appears with a divided stem below.⁴ In accordance with a well-known tendency of Hittite art, whether or not with a reminiscence of this very

¹ *Jahrbuch d. k. d. Inst.* 7 (1892), p. 191. So too Fritze, *op. cit.*

² Lajarde, *Culte de Mithra*, Pl. XXXVI. Fig. 13.

³ Cf. Lajarde, *op. cit.* Pl. XXXIV. Fig. 6 ;

Pl. XXXV. Figs. 2 and 4 ; Pl. XXXVI. Figs. 8, 9, 10 and 11.

⁴ On objects belonging to the first Dynasties found by M. Amélineau at Abydos.

early Egyptian tradition, the symbol now shows a tendency to acquire two legs and even at times a head. On the Tarsus seal¹ it appears above an altar and associated with other ritual scenes, in slightly variant forms in which the lower limb has divided into two legs and the circle at the top has sometimes a kind of conical cap (see Fig. 54, 3). On a cylinder² it is seen in the hands of an attendant behind a princely worshipper in a form which combines the two legs with the original lower limb (Fig. 54, 4). It will be sufficient to compare this last modification with those on the Tarsus seal to see that in the Mycenaean figure we have to do with another member of the same series. In other words the Mycenaean symbol is a direct derivative from the Egyptian *ankh*, as a sign of divinity, through intermediate forms which must be sought in the cycle of Hittite iconography. This symbol both on the Tarsus and Indilimma seals is placed in juxtaposition with a triangular sign probably denoting a Goddess and must itself be taken to represent the male member of a divine pair. The allied form (Fig. 54, 6) was copied by me from a stele at Carthage, and was surmounted by the orb and crescent of two conjoined divinities.

In the present case the curved ends of three of the limbs suggest as already noted that this ancient symbol has been crossed by that of the double axe, and its substitution in the place of the axe and armed figure on the ring from the Mycenae treasure seems to show that it stands here in connexion with the same God. It may therefore have a direct bearing on the subject immediately below it.

The discoverer of the Vapheio ring failed to recognise the character of the representation on this side of the field and even described it as 'an object like an insect, but of disproportionate size.'³ Max Mayer, Furtwängler, H. von Fritze and others have since seen in it a helmet with a long crest resting on a shield. A close examination had long convinced me that the representation in question really consisted of a small female figure in the usual flounced dress, with one arm bent under her and the other stretched forward, prostrate on a large Mycenaean shield. On the more recently discovered ring from Mycenae we now see a different version of the same scene. A female figure in the habitual costume this time leans forward resting her two arms in a pensive attitude on the balustrade of what appears

¹ Cf. Thomas Tyler, *Babylonian and Oriental Record*, 1887, pp. 150, 151, and 'The Nature of Hittite Writing,' *Trans. Congress of Orientalists*, London, 1892, p. 261 *seqq.* As Tyler rightly points out, this development of the symbol stands in a near relation to the 'headed triangle' emblem of Baal and Ash-toreth on Carthaginian stelae. Here the side limbs assume the form of arms and this anthropomorphised symbol seems to have affected the later development of the sacred cone at Paphos and elsewhere. The distinguishing feature of the Carthaginian modifi-

cation of the Ankh is the 'arms, in the Hittite the legs.

² Lajarde, *op. cit.* Pl. XVIII. Fig. 7.

³ Tsuntas, 'Εφ. 'Αρχ. 1890, p. 170 'ἀντικείμενον τι ὡσεὶ ἔντομον ὑπερμέγεθες.' Max Mayer (*Jahrbuch d. Arch. Inst.* 1892, p. 189), recognised the shield but took the figure above it for a helmet with a high crest. He regards the shield and the imaginary helmet as having been laid aside by the male figure. But the analogy of the parallel ring Fig. 53 shows that the figure is simply an attendant.

to be a small columnar shrine like that which encloses the sacred tree and pillar on the opposite side of the field. With down-turned face, she seems to contemplate the contents of this little sanctuary, which is divided by a central column into two compartments. The first of these, hung with two festoons, contains a short baetylic pillar like that on the analogous ring from Vapheio. In the second is what on minute examination appears to be a miniature but clearly defined Mycenaean shield. Here then with additional accompaniments we find the theme of the outermost design of the Vapheio ring also reproduced on the example from Mycenae. In one case we see a female devotee actually prostrate on the shield, in the other she bends down over it leaning for support on the small shrine in which it seems to be hung. The same parallelism thus runs through all the leading features of the two rings.

It is true that in the last pair of scenes on the extreme right of the field there is a great difference in the size of the body-shields. But this disproportion is really conditioned by the character of the two representations. In the one case we have only to do with the shield itself and the recumbent votary. In the other, the female figure leans on a shrine containing the shield, and the size of the shield itself is naturally reduced. The shrine itself, we may imagine, was really much larger in proportion to the leaning figure, and the whole composition is analogous to others of the same glyptic cycle in which, as in the ring shown in Fig. 64, the seated Goddess is seen seated against the shrine containing her aniconic image, or, as in the case of Cypriote cylinders, using the sanctuary itself as a throne. It does not necessarily follow from this that the shrine itself was quite so diminutive.

The scene to the right of the first ring, the female figure prostrate on the body-shield, is evidently one of mourning for a dead warrior. We recall the large body-shield covering the body of the slain combatant beneath the horses of the chariot on the funeral stela of Mycenae, though in the present case no human figure is visible. The shield by itself, however, is sufficiently suggestive of departed valour, and at Falerii we find the early Italian oval shield, afterwards imitated by the Gauls, supplying, as laid on its back, the model for a sepulchral monument. It has already been suggested above,¹ that the shield equally with the double axe may be regarded as the material impersonation of the divinity. The *ancile* fallen from heaven, which represents the Mycenaean shield on Italian soil, recalls the sky-fallen baetylic stone.

There are, however, indications that the mourning scene on the ring does not refer to the decease of a human warrior. The emblem of male divinity above must reasonably be taken in connexion with it. Moreover, on Schliemann's ring from the Akropolis treasure at Mycenae, and again on the painted slab, the Mycenaean body-shield appears as a prominent attribute of a warrior God, whose character in the case of the ring is further indicated by the double axe.

The religious intent of the representation is further brought out by the

¹ See p. 122.

companion scene on the more recently discovered ring. The shrine, in which the shield is here apparently hung up, and the baetylic column contained in it, gives the whole an aspect of consecration. At the same time, the attitude of the female figure leaning on the balustrade, like that of the votary prone on the shield itself on the other signet, is strongly suggestive of mourning. The baetylic column, as has been already shown, can be also a sepulchral monument, not necessarily of a human divinity. We seem to be in the presence of the tomb of a divine hero, or rather of a warrior God.

We have already ventured to detect one surviving offshoot of the cult of an armed Mycenaean divinity in that of the Amyklaean Apollo, common both to Cyprus and Laconia, and the affiliation with Apollo in another form is brought out by the persistence of the primitive aniconic image in the case of Apollo Agyieus. On the other hand, the spear is also an early attribute of Zeus, and, as already pointed out, the double-axe, or *labrys*, on the ring from the Mycenae Treasure, brings the male divinity into a close relationship with the Zeus Labrandeus of Karia, and the Zeus-Minôs of the Cretan Labyrinth. At Knossos, his aspect as a solar deity, so well illustrated by the gold ring from that site, is brought out by his connexion with Pasiphaê, the Moon Goddess. Elsewhere, as at Gortyna, we see the Cretan Zeus associated with Europa, the daughter of Telephassa, another form of the Moon Goddess.

But this identification of the armed divinity of this dual cult, of whom the Mycenaean body-shield might be regarded as a special attribute, with the 'Cretan Zeus' of later religious tradition, supplies an interesting commentary on what appears to be the sepulchral shrine and suspended shield on our ring. We have here, it may be, a prehistoric representation of the 'Tomb of Zeus.'

§ 26.—*Sacral Gateways or Portal Shrines, mostly associated with Sacred Trees.*

The sanctity of the portal or doorway in primitive cult is very general,¹ and its association with the sacred tree is well brought out by some of the Pompeian wall-paintings. To this day the traveller in the Caucasus may see outside the Ossete houses a rude arch or gateway placed beside the stump which represents the ancestral tree of the household. In Phrygia we have a series of inscriptions coupling the altar (*βωμός*) and doorway (*θύρα*), as sacral erections. The doorway itself, like the dolmen in parts of India, can, as much as the baetylic pillar, serve as the temporary dwelling place of the God or Spirit and, in a sense, as his material image.

In the gold ring (Fig. 55) from the Lower Town of Mycenae, a man in the usual Mycenaean garb, who perhaps answers to the male attendant of the Goddess in other religious scenes, is seen reaching out his hand towards the

¹ For the truths of primitive cult we need go no further than Stonehenge.

topmost bough of what is perhaps also intended for a fruit tree. Behind him with the branches of another tree visible above the back, stands a large *agrimi* or Cretan wild goat—an animal seen elsewhere in connexion with female votaries. This goat may represent the sacred animal of either the male or female member of the divine pair referred to in the preceding sections. As an attribute of Aphrodité it is well known in later cult; on the other hand the votive remains of the Diktæan Cave as well as the traditions of



FIG. 55.—PORTAL SHRINE ON GOLD SIGNET RING FROM MYCENAE (†).

Amaltheia tend to show that this animal was sacred to the indigenous 'Zeus' at an earlier period than the bull. The ox indeed in any form seems to be absent in the more primitive archaeological strata of the island. Though frequent in representations of the Mycenaean period, among the earlier Cretan pictographic figures it is entirely non-apparent.

The 'portal shrine' here seems to be supported on either side by double columns. The same type of shrine recurs on an unpublished gold

ring from Mycenae (Fig. 56).¹ Here we see a female votary standing in a half facing attitude between a trifoliate tree or group of three trees—for the trunk too seems to be triply divided—and a small shrine on a rocky knoll. The sprays of some smaller plants rise on each side of her, and two longer shoots form a kind of canopy over the tree and the standing figure. The votary herself wears the usual Mycenaean dress and the long plaits of her hair stream down beneath her right arm, the upper part of which is encircled with a ring. Her feet point in the direction of the tree, but her

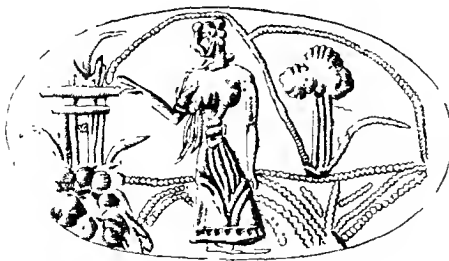


FIG. 56.—CLIFF SCENE WITH SACRED TREE AND PORTAL ON GOLD SIGNET RING, MYCENAE (†).

¹ In my own collection.

head and the upper part of her body are turned backwards, so that she gazes on the rock shrine, towards which, moreover, her right hand is raised in the attitude of adoration.

The shrine itself consists of what are apparently two pairs of slender pillars supporting an entablature consisting of three members—an architrave, a frieze with vertical lines, which seem to represent the continuation of the lines of the columns below, and a wider cornice above. The whole forms a kind of archway, and between the double columns is visible a small object which has the appearance of a flying bird. Resting on the entablature is seen one of the usual two-horned appendages of Mycenaean cult, from behind which rises a spray. Two other small sprays shoot from the rocks immediately on either side of the shrine. These connecting sprays and the divided attitude of the Goddess link together the sanctity of the triple tree and the shrine.

On another signet ring of gold found by Dr. Tsuntas, in 1895, in a tomb of the Lower Town of Mycenae,¹ occurs a cult-scene, somewhat enigmatic in its details, which requires careful analysis (Fig. 57). Two female

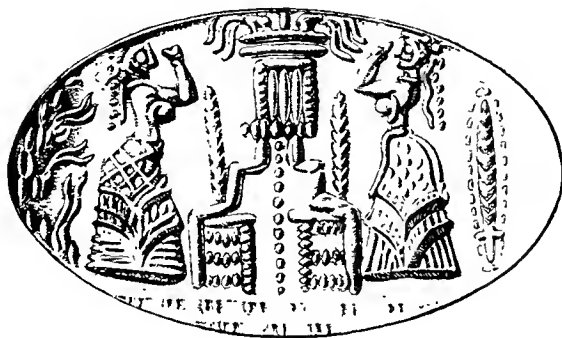


FIG. 57.—CULT SCENE WITH SACRED TREE AND PORTAL; GOLD SIGNET RING, MYCENAE (?).

votaries of the usual type stand on a stone terrace, on either side of a central tree shrine, which is raised on a graduated base. The summit sanctuary consists of a group of the three trees, the heads of which appear above, and the trunks within an arch, which consists of an entablature supported by two pillars built of a series of separate blocks. From the centre of this, a line of dots, perhaps representing a path—the *via sacra* to the shrine—descends to the terrace below. At this point, on either side, are what appear to be two doors, with an interval between, as if they had been thrown open, and somewhat recalling the Gates of Heaven, opened wide by the attendant genii for the passage of Samas, as seen on Chaldaean cylinders. We may, perhaps, suppose that the whole represents a shrine on a peak surrounded by a temenos

¹ I also owe the impression from which Fig. 57 has been drawn to Dr. Tsuntas's kindness. The signet has since been figured by

Furtwangler, *Ant. Gemmen.* ii. p. 24, and by H. von Fritze, *op. cit.* p. 73, 5.

wall, which is here made to descend in regular steps. On the lower step of this is seen, on either side, a cypress-like tree, and a tree of the same kind may be recognised behind the adorant to the right, surrounded with a dotted oval, which, perhaps, may be taken to indicate a kind of sacred halo like that round the Cypriote obelisks and pillars. Behind the other female worshipper is a bush-covered rock.

Attention has already been called to the significance of the tree trinity in the central sanctuary of this design, which also seems to find a parallel in the last described signet ring.

An illustration of a holy gateway or shrine without a sacred tree is supplied by a gold-plated silver ring (Fig. 58),¹ found by Dr. Tsuntas, in a tomb of the lower town of Mycenae in 1893. The lower part of the bezel has unfortunately perished, but the remaining half shows the upper parts of the bodies of three female votaries, the middle one of whom



FIG. 58.—SACRAL GATEWAY AND VOTARIES ON GOLD-PLATED SILVER RING, MYCENAE (?).

raises her hand in the attitude of adoration before two upright double columns, supporting a kind of double impost or lintel upon which, as a sign of its sanctity, rests the cult object, already referred to as 'the horns of consecration.'

On a steatite bead seal of somewhat rude execution, found in a Mycenaean beehive tomb at Ligortino, in Crete, there occurs a somewhat variant design (Fig. 59).² The doorway here seems to belong to a kind of temenos, analogous on a smaller scale to that of Fig. 48 above, within which the tree perhaps rose on an elevation. The tree itself seems to be surrounded by a small inner fence, just as the sacred cone on the coins of Byblos appears in a lattice-work

¹ From an impression taken with Dr. Tsuntas's kind permission. The signet is also reproduced by Furtwängler, *Ant. Gemmen*, Pl. VI. 4, and by H. von Fritze, *Stein Inschriften*, p. 72, 4.

² The greater part of the contents of this

tomb were acquired by the Louvre; unfortunately, however, the lentoid intaglio in question is wanting. Fig. 59 above is from a sketch of the stone made by me when it was in the finder's possession shortly after the discovery of the tomb.

enclosure within the great court of the temenos. Behind this rises a horned prominence which either represents a part of the usual two-horned cult object or a single horn having the same sacral import. It supplies an interesting parallel to the single horn on the capstone of the cellular shrine, to be described in the next section, the mis-interpretation of which as the back of a throne led Dr Reichel so far astray.¹

A female votary stands before the enclosure with the hand raised in the usual attitude of adoration. But the most significant feature of the design remains to be described. Behind the doorway and beneath the platform on which the tree rests is engraved a large crescent which clearly connects this cult scene with a lunar divinity. The position of this crescent, which appa-



FIG. 59.—SACRED TREE AND ENCLOSURE ON STEATITE LENTOID, LIGORTINO, CRETE (?).

rently brings it into relation with a sanctuary below this, suggests the explanation that the gateway and outer temenos may have led to the mouth of a cave sacred to the Moon Goddess, above which again was a holy tree.

§ 27.—*The Dolmen Shrines of Primitive Cult and Dove Shrines of Mycenae.*

It is possible that some of the objects described in the preceding section as sacral doorways or portal shrines really represent slabs supported by four pillars, and that we have here to do with holy 'table-stones,' or to adopt the well-known Celtic word for this religious structure, with 'dolmens.' The double pillars on either side of some of the examples given might bear out

¹ See below p. 189

this idea, but on the other hand the elaborate entablature of two stages, which they support, weighs in favour of the sacral gateway.

In considering the pillar cult of the Mycenaeans we are continually brought face to face with an aspect of this ancient worship, which can never be lost sight of—its connexion namely with the monumental forms of primitive sepulchral ritual. In India, where a living study can be made of this baetylic cult, it is seen at every turn to be deep-rooted in sepulchral religion. The stone chamber of the grave mound can itself be regarded as the dwelling-place of a Spirit, and receive worship as a divinity. At other times it is dissociated from direct sepulchral contact, and becomes a miniature shrine for a small pillar idol. Good examples of a dolmen shrine of this kind placed at the foot of sacred trees may still be seen in the Shiarai Hills between Madras and Malabar,¹ of which one is reproduced for comparison in Fig. 60. Here we see the rude baetylic pillar surrounded by smaller pebbles, set up on the floor of the

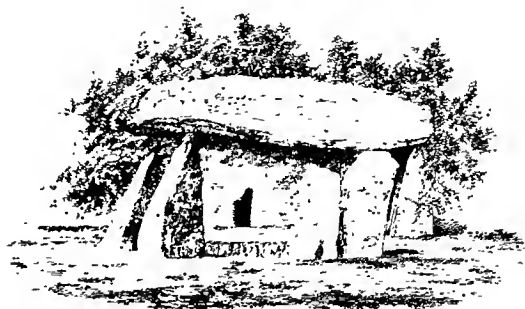


FIG. 60.—BAETYLIC STONE IN DOLMEN SHRINE, SHIARAI HILLS, INDIA.

megalithic cell in a manner which recalls the small pillars seen within the shrines in some of the Mycenaean cult scenes described above.

In other cases it will be seen that the baetylic pillar itself performs a structural function and helps to support the capstone of its dolmen shrine.

The Mycenaean column in its developed architectural form, as can be seen from its entablature, essentially belongs to woodwork structure. The fundamental idea of its sanctity as a 'pillar of the house,' may at times, as in the instances quoted above,² have been derived from the original sanctity of the tree trunk whence it was hewn, and a form, in this way possessing religious associations, have been taken over into stone-work. But there is also what seems to be conclusive evidence that among the Mycenaeans pillar supports of a very primitive form of stone construction have left their trace on the Mycenaean column in its perfected shape, and explain indeed its most characteristic feature, namely the downward tapering outline which

¹ M. J. Wallhouse, 'Non-Sepulchral Rude Stone Monuments,' *Journ. Anthr. Inst.* vii, p. 21 *seqq.*

² See p. 145.

distinguishes it alike from the columns of Egypt and the East, and from those of later Greece.

There exists a well-marked type of primitive and originally sepulchral structures, consisting of megalithic blocks, in which, in addition to the massive side walls, stone pillars are also introduced into the dolmen chamber to give a central support to the roof slabs.

This form of construction seems to be quite typical in the Iberic West. In some of the great Spanish megalithic structures, like that of Antequera, stone pillars are seen at intervals along the centre of the gallery which serve as central supports for its great capping slabs, the ends of which rest on the upright blocks that form the side-walls. In more than one type of prehistoric buildings found in the Balearic islands a similar structural method presents itself (Figs. 61, 62)¹ The centre of a horizontally vaulted chamber

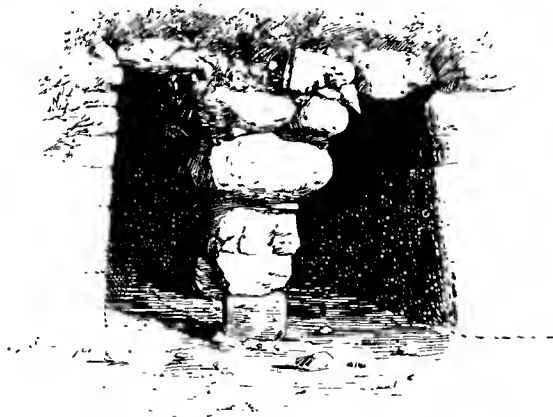


FIG. 61.—PILLARED CHAMBER OF 'NAU,' MINORCA.

derives its support from a column the upper part of which consists of cross slabs gradually increasing in size so as to present the appearance of a gradually widening pillar and capital. The object of this is to meet the inwardly inclining walls of the chamber and form a kind of Tirynthian passage all round. It will be seen that in its most characteristic development this class of pillar supplies a simple explanation for the origin of the peculiar downward taper of the Mycenaean column. This is the true 'Pillar of the House.'

In many caves, however, the Balearic monuments, and notably the so-called Talyots, show an upright block with almost perpendicular sides, on the top of which one or more 'capital' slabs are laid. Several pillars of this kind which are in fact huge biliths have survived, while the walls of the surrounding

¹ Cartailhac, *Monuments Primitifs des îles Baléares*. Fig. 61 is taken from a monument of the kind known as 'Nau' (*op. cit.* Pl. 46).

Fig. 62 from an underground chamber of the kind known as 'Cort' (*op. cit.* p. 18).

chamber built of smaller blocks have been entirely ruined, and they are popularly known as 'altars' in the island. The buildings in which they originally stood do not seem to have been ordinary dwelling houses since, as M. Cartailhac has pointed out, only a single structure of this kind is to be found in each of the prehistoric settlements of Minorea. It is possible therefore that they were shrines, and in that case the so-called 'altars' may well have been regarded like the Mycenaean and Semitic 'pillars of the house' as the seat of the tutelary divinity. Many of the Bhuta stones of India, already referred to as baetylic forms of a spiritual being, consist of an upright pillar with a cross piece at the top which seems to have been derived from some such primitive structure as the preceding.

We shall see the same type of primitive pillar as that of the Balearic islands, tapering towards the base and with capping stones above, in the side cells of the great megalithic buildings of the Maltese islands, which are

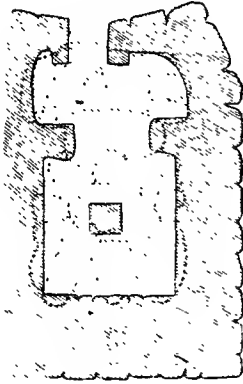


FIG. 62a.—PLAN OF 'COVA,' MINORCA.

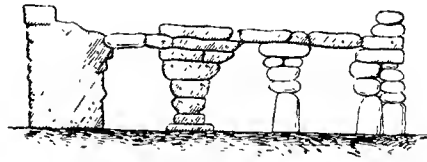


FIG. 62b.—SECTION OF 'COVA,' MINORCA.

certainly connected with a primitive sepulchral cult.¹ It is moreover a noteworthy fact that the front outlines of the supporting walls of some of the sepulchral cells of the period immediately preceding that of Mycenae recently discovered at Chalandrianê in Syra present the appearance of similar columns gradually decreasing towards the base.²

The dolmen-like character of many of the Mycenaean shrines upon the rings, and the reminiscences they present of such primitive forms as the trilith in connexion with the sacred tree much as we see it on the Poupeian frescoes, make it natural to turn to the same class of primitive structures for further comparisons. When, then, upon two of the gold signet rings,³ we see through the simple trilithic opening of a small shrine a pillar with flat capping stones

¹ See below, p. 197.

² *Εφ. Ἀρχ.* 1899, Pl. VII. 4. See above, p. 120.

³ See below, Figs. 63, 64. These designs

have been already independently compared by Max. Mayer, *Myk. Beitr.* ii. *Jahrbuch*, 1893 p. 190, 5.

laid on it capital-wise standing beneath the middle of the lintel or roof stone there can be no reasonable doubt that we have to do with a survival—modified no doubt in several ways—of the same kind of columnar cell that we see in the Talyots and other similar structures.

A good example of the cellular shrine, the lintel of which is supported by a pillar with capping stones increasing in size, will be seen in Fig. 63 from a gold ring from Mycenae.¹ Here we see the baetylic shrine approached by three female votaries with one hand raised in the gesture of adoration, two of whom hold sprays taken, no doubt, from a sacred tree. Upon the top of the shrine, as in so many parallel cases, appears the symbol of consecration with which we are already familiar, except that in this case as in Fig. 59 above only a single horn is represented. This omission is, perhaps, due in both cases to the fact that while the votary faces the two-horned object, the spectator may be supposed to see it in profile. In the present instance, however, as what appears to be the base of the object in question is apparently visible, the second horn may have been simply left out owing to the fact that the votary's forearm intrudes into the space it might otherwise have occupied.



FIG. 63.—FEMALE VOTARIES BEFORE PILLAR SHRINE: GOLD SIGNET RING, MYCENAE (?).

The character of the worship and of the objects represented is abundantly clear from the examples already reproduced. Yet the comparative materials at his disposal did not save Dr. Reichel from a capital error in describing the cult scene on this ring.

The ingenious author of 'pre-Hellenic cults' has taken the remaining horn of the 'horns of consecration' for the back of a seat and the base for its arm. The double-outlined side blocks of the shrine become four legs naively represented with the further pair just seen inside the nearer, and the baetylic pillar becomes a fifth leg or central prop, a little superfluous, it might be thought, for an incorporeal sitter. For the whole, according to Dr. Reichel's theory, is a throne of a Mycenaean divinity who is himself invisible to his worshippers.²

Upon this strangely fantastic base, for there is no other, has

¹ Tsuntas, *Νυκῆναι*, Pl. V. 3; Perrot et Chipiez, vi. Fig. 428, 23. Reichel, *Vorhellenische Götterkulte*, p. 3; Furtwängler, *Ant. Gnomon*, iii. p. 44, Fig. 21. H. von Fritze, *Strena Helbigiana*, p. 73, 3.

² W. Reichel, *Ueber vorhellenische Götterkulte*, p. 5: 'Das Gebäude ist ganz deutlich

ein Thron. Vier Beine die naiv so gezeichnet sind dass man das jenseitige Paar innerhalb des vorderen erkennt, zusammen einer Säule, tragen das Sitzbrett: über diesem eine niedere Armlehne und eine steile Rückenlehne, streng in Profil.'

been built up the whole theory of a Mycenaean cult of Sacred Thrones. All that has been said in these pages is certainly in favour of the view that the cult objects of the Mycenaeans were of the aniconic class. The thing actually worshipped was the tree or pillar possessed by the divinity. But, as pointed out above in the case of the pictorial representations seen on the signet rings, the anthropomorphic figures of divinities are introduced beside their aniconic equivalents. Sometimes the divinity is placed beneath the sacred tree. On the fellow ring to that on which this theory of throne-cult has been based, the Goddess sits beside her shrine. On a Cypro-Mycenaean cylinder she sits upon it. Were the present representation a throne we should expect to see, as in fact we find on another signet, the divinity upon it.¹ But in truth the idea of a divine throne belongs to a period of more advanced anthropomorphic cult. The ideas that underly the cult of baetylic stones and sacred trees show that these material objects did not so much



FIG. 64.—GODDESS SEATED BEFORE PILLAR SHRINE, ON GOLD SIGNET RING, MYCENAE (1).

serve as a resting place for airy spiritual forms, but themselves absorbed and incorporated their essence; they are *ἐμψυχοὶ λίθοι*. As the idea of the visible anthropomorphic divinity encroaches on the earlier notions, it is these pre-existing baetylic shapes that serve at first as seats and supports for it. Among these the throne has no place. It is rather the omphalos, the altar, the tomb, or the shrine itself, that became the seat.

A gold signet-ring now in the Berlin Museum (Fig. 64) gives a variant form of the same design as the above. In this case the pillar shrine is raised on a kind of base and the Goddess herself sits with her back against it, holding up a mirror-like object and receiving the adoration of a female votary. Here we are left in no doubt as to the sacred character of the sup-

¹ See the signet ring, Fig. 51 above.

porting pillar within the cell, for at its foot the familiar 'horns of consecration' stand clearly defined.

These single baetylic cells with the sacred object at the foot of the pillar, or upon the roof-stone lead us naturally to what is really only a more elaborate example of the same religious structures—namely the triple sanctuaries with the doves, of which models in thin gold plate were found in the third Akropolis grave at Mycenae (Fig. 65). The building here is more elaborate and conventionalised. Like the small Phoenician shrine known as the Maabed of Amrit the actual cells are raised upon a stonework base and a Mycenaean altar is set on the roof of the central shrine. But the objects which the sanctuary itself was intended to enshrine are the same baetylic 'pillars of the house,' having, as in the last example, the 'horns of consecration' set at the foot of each. They seem to stand at least a little way



FIG. 65.—GOLD SHRINE WITH DOVES; THIRD AKROPOLIS GRAVE, MYCENAE.
(From Schliemann's 'Mycenae'.)

back from the openings themselves, since there is room for the cult object to be placed in front of them.

The parallelism between the triple dove shrines and the single baetylic cells on the rings must set all doubts at rest as to the true character of the miniature temples with which we have to deal. How far astray the ingenuity of commentators could go in the absence of comparative materials is shown by the theory which saw in the dove shrine the front of a large basilican building and in the Mycenaean altar of the ordinary type, which crowns the central cell, a window with 'semicircles introduced either to fill up the space or as ornaments on the shutters.'¹

¹ Schuchhardt (Sellers' Translation), p. 200. niches should be interpreted in the same manner: they merely cover the empty space

It has been already noticed that the comparative size of the doves on the gold shrines and of the 'horns of consecration' both on these and the analogous pillar-cells upon the rings, are themselves indications that we have here to do with quite small structures. We see before us, in fact, cellular chapels which still bear traces of their origin from the simple structural forms akin to the pillared galleries of Spain or the primitive monuments of the Balearic islands. This kind of baetylic cell is not by any means always of the type in which the pillar acts, as in the above instances, as a support for the roof-stones. Sometimes, as has been already pointed out, we see a short upright stone, the top of which stands well below the roof slab. But in all cases it is safe to say that we have to do with comparatively small cells.

§ 28.—*Fresco representing a small Baetylic Temple from the Palace at Knossos.*

The dove shrines of Mycenae though still small in dimensions are already considerably advanced beyond what has been described above as the primitive dolmen cell. It has been reserved, however, for the Palace of Knossos to produce the evidence of a still further development of a similar type of Mycenaean sanctuary.

This is supplied by some fragments of fresco, part of a series in a curious miniature style, found in a room to the north of the great Eastern Court of the Palace. The associated fragments show large crowds of people of both sexes, groups of elaborately dressed Mycenaean ladies engaged in animated conversation, warriors armed with spears and javelins, part of the city walls and the other buildings. A fragment of the wall of a sanctuary belonging to this series with a row of 'horns of consecration' on the top, has been already given in Fig. 18.¹ A coloured reproduction of the pieces of fresco representing the Mycenaean shrine will be seen on Plate V.

The open space in front of this small temple is crowded with men and women, the sexes being distinguished according to the Egyptian convention by their being respectively coloured reddish brown and white. To facilitate this effect the artist has availed himself of a kind of pictorial shorthand, giving the outlines of the men on a red ground and of the women on a white. A seated female figure is also depicted with her back to the right outer wall of the shrine itself, a useful indication of its comparative dimensions.

The small temple here delineated is essentially an outgrowth of the same type as that of the dove-shrines. As to the question whether it, too, had an altar on the roof we have no evidence, but otherwise the fresco has preserved enough of its construction to enable us to reconstitute the façade

or else they are pateras decorating the doors.' Still, Dr. Schuchhardt admitted 'the position of the columns themselves in the centre of

the openings remains a problem.'
¹ P. 136.

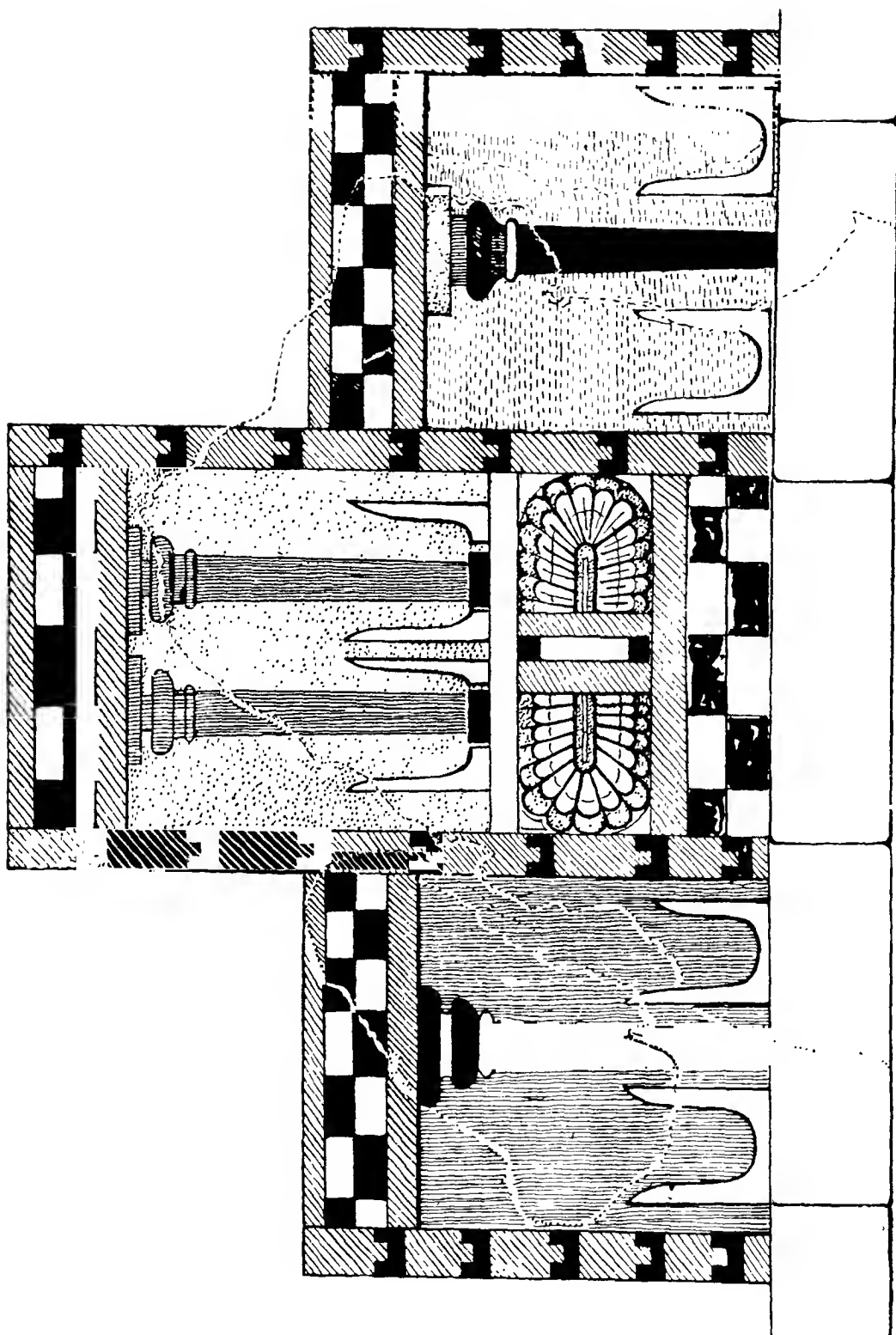


FIG. 66—FACADE OF SMALL MYCENAEAN TEMPLE, COMPLETED FROM THE FRESCO PAINTING OF THE PALACE, KNOSSOS.

in its entirety (Fig. 66). The building rests on a base consisting of large white blocks, which apparently continue beyond it. As to the character of these the existing remains of the Palace supply a sufficient indication. They are the great gypsum blocks, such as in large parts of the building, and notably along its western side, form the lower part of the walls, which above this massive layer seem largely to have consisted of clay strengthened by a wooden framework, and coated with plaster often brilliantly painted with polychrome designs. Analogy, as well as the varied colouring on the face of the building, would lead us to suppose that the same structural method had also been largely resorted to in the shrine reproduced in the fresco. The mortise and tenon motive of the upright posts which divide the cells and mark the outer walls of the building are certainly taken from woodwork, and seem to imply a succession of vertical and horizontal beams.

There can, of course, be no doubt that the white and black chequer-work is taken from stone-work construction, though the builders of the Palace—who were surprisingly modern in some of their procedures—were quite capable of producing stucco imitation of masonry. In the south-west porch of the building is a clay and rubble wall faced with painted plaster, the lower part of which imitates blocks of variously coloured marble. As in the case of the Temple this chequer work is apparently contained in a wooden framework, it is safer to regard it too as painted plaster. The white and black chequering is a favourite decoration of Egyptian architectural painting,¹ and it is probable that this feature, as undoubtedly a characteristic detail, to be noticed below, in the formation of the capitals of the columns, was borrowed from this source.

Of peculiar interest is the appearance, immediately below the central opening, of two elongated half rosettes, separated by a threefold division, which present a most striking analogy to the frieze² found in the vestibule of the Palace at Tiryns. The white and the blue of the side slabs here answer to the alabaster material and blue glass (*κύανος χυτός*) inlaying of the Tirynthian example, while the red streaks show that the half rosettes were in this case still further coloured. The parallelism here is of such a kind as to induce the belief that what is seen on the façade of the Knossian shrine also represents actual slabs of inlaid alabaster. But there is a further detail in the present case which confirms the conclusion that these are not merely spaces filled with painted stucco. The alabaster slabs, with the similar foliated designs, from the Palace of Tiryns are linked by smaller pieces in the same material, the threefold division of which has been recognised as supplying the prototype of the Doric triglyph.³ These Mycenaean triglyphs stand forward somewhat beyond the plane of the 'metopes,' and secure them by overlapping their edges. At Tiryns the triglyphs are of alabaster, like the intervening slabs. But on the Knossian shrine the outer posts of these,

¹ Compare for instance the chequer decoration over a house from a Sixth Dynasty Tomb. (Maspero, *Mon. of Egypt. Arch.*, Engl. Edition, p. 21).

² See Dorpfeld in Schliemann's *Tiryns*, p.

284 *seqq.* and Pl. IV. and Perrot et Chipiez, *L'Art.*, etc. vi. p. 698 *seqq.*

³ Dorpfeld, in Schliemann's *Tiryns*, p. 284. Perrot et Chipiez, *L'Art.*, etc., vi. p. 710 *seqq.*

as well as those beneath the metopes, are coloured with the same brown hue as the pillars on either side of them—in other words, they are of wood-work. It is evident that this is the earlier form, and that the original Mycenaean triglyph that supplied the prototype for the Doric, was of the same material as the guttae below them, which are well known to be the translation into stone of wooden rivets. Here, in fact, we have wood-work bars so fitted as to lock the edges of two alabaster plaques. Had the 'metope' fields been of plaster there would have been no occasion for a separate wooden triglyph.

The white horizontal coping immediately above the triglyph and metopes, on which the bases of the uppermost pairs of columns rest, is probably of gypsum, like the larger blocks of the plinth below, from which the columns of the side chapels rise.

The columns themselves, of which there are a pair in the central shrine, and one in each of the wings, are undoubtedly of wood. Except for some square pillars made of separate blocks, no trace of stone shafts or capitals was found in the Palace of Knossos, and their non-discovery is quite in keeping with the evidence supplied by the Palaces of Tiryns¹ and Mycenae. At Knossos, however, we have the positive phenomenon that the burnt remains of wooden shafts of columns resting on the stone disks that formed their bases were actually found in the Throne Room of the Palace. These columns, three in number, which supported the roof of the small *impluvium*, were of cypress wood, a material which seems to have been commonly used here, as in the Palace of Odysseus.²

It is possible that those in the wings of the present design, the shafts of which are coloured black, were of different materials from the central pair, which are brown, though of a somewhat redder hue than the woodwork of the front of the building. But the variations in hue—especially noteworthy in the capital of the right-hand column—where blue, reddish-brown, black and white succeed one another—show that whatever the underlying material the surface of the wood was painted over.

Certain black markings on the echinus of the capital above referred to perhaps indicate the existence of a fluted foliation like that of the half capital from the 'Treasury of Atreus,' which also recurs in the metopes already described. Both this foliation, and the inlaid work that goes with it, are derived from contemporary Egypt, as may be seen from the fragments of capitals from the Palace of Akhenaten, at Tell-el-Amarna. Another feature of these capitals is equally Egyptian. This is the small rectangular cushion which intervenes between the rest of the capital and the slab, suggestive of a beam-end upon which the architrave immediately rests.

On the other hand, the shafts of the columns have the downward taper characteristic of the Mycenaean order. This, it may be noted, is specially appropriate in a building which *ex hypothesi* represents the translation of the primitive stone cells with their Talyot-like supporting pillars into a more roomy structure, the framework of which is of wood.

¹ See Dörpfeld in Schliemann's *Tiryns*, p. 270 *seqq.*

² Homer, *Od.* xvii. 340.

Here, too, as in the case of the dove shrines, and the smaller baetylic cells already described, the sacred character of the pillars is indicated by the horns in front of them, and beside them. The clear way in which this cult object is indicated in the fresco before us, must, in fact, remove all remaining doubt as to the true meaning of the curved design at the foot of the pillars of the dove shrines and the so-called altars of the signet rings which has been so variously explained. The columns of the Knossian shrine apparently approach the outer edge of the openings, leaving room, however, in front of them for the 'horns of consecration.'

The word cell, or chapel, has been used to express the three compartments of the sanctuary, for it is impossible to regard it merely as a triple archway open to the day. Had this been the case the ground colour seen through each opening would have been the same. But, as a matter of fact, the background of these is painted successively a reddish-brown, azure blue, and yellow. They must be regarded, therefore, as closed chambers. The evidence before us, moreover, leads to the conclusion that the whole structure, though somewhat larger than the dove shrines, is still of small dimensions. The horned objects are in height over a third that of the columns. The heads of the crowd in the space in front of the building, and still more the female figure seated with her back to the right wall, afford a still nearer guide to the size of the whole. If the building is proportionately rendered, it would appear that the height of its central part from the ground level to the summit was not more than nine feet.

§ 29.—*Parallels to the Baetylic Shrines of the Mycenaeans, supplied by the Megalithic Sanctuaries of the Maltese Islands.*

From the evidence already put together it will be seen that the Mycenaean cult of trees and pillars, in common with the whole Mycenaean civilisation, must be regarded as *in situ* in its Aegean homes. It fits on to a parallel system of primitive worship on the Anatolian and Syrian side. In its external aspects it shows signs of adaptation from Egyptian, to a less extent from Semitic sources, and it has also been possible to cite a striking analogy from Libyan soil. It receives illustration from the early elements of Italian religion and some interesting materials for comparison with the Mycenaean pillar shrines are supplied by the sepulchral structures of the Iberic West.

It is possible to point out in some respects a nearer and at the same time a contemporary comparison in the Western Mediterranean area which comes within the ascertained range of Mycenaean intercourse. The great prehistoric buildings of the Maltese islands, commonly but erroneously referred to the Phoenicians, afford unique monumental evidence of a baetylic worship akin to that illustrated by the cult scenes described in the preceding sections.

In the side chapels of the megalithic sanctuaries of Hagiar Kim and the Giganteja aniconic pillar idols are still to be seen either standing in

their original place or lying near it. The ground scheme of these great megalithic buildings recalls the internal structure of a chambered barrow with lateral and terminal apse-like cells, but in this case it is by no means certain that the whole was roofed over. The baetylic pillars stood, and in some cases still stand, within the side cells or chapels, at times with an altar block in front of them and shut off originally by separate stone door-ways from the main gallery, the opening of these cells where preserved recalling those of rock tombs such as those of Chaoaach in Tunisia or those of the opposite coastland of south-eastern Sicily. The apse-like walls of the cells form a horizontal vaulting like incomplete bee-hive chambers. At Hagiar Kim a small apse of this kind is worked into the outer wall and within it a baetylic

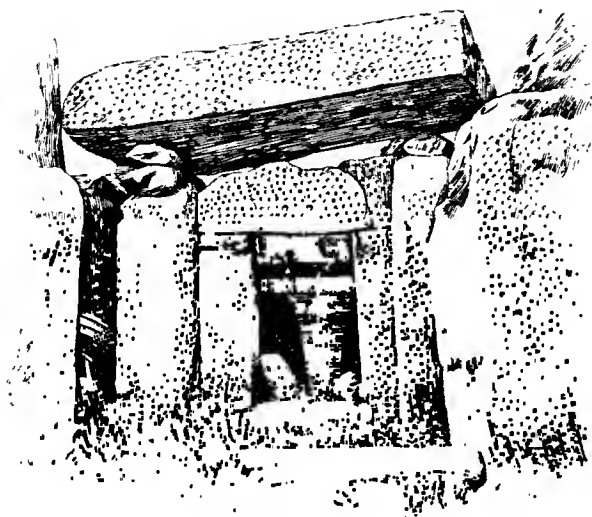


FIG. 67.—PILLAR CELL OF HAGIAR KIM, MALTA.

pillar of a roughly square section with rounded angles stands *in situ*. In front of the pillar is a somewhat hatchet shaped 'altar-stone' decorated with the usual pit markings, and on either side are two large, upright blocks which may have supported a stone lintel forming thus a trilithic portal through which the pillar idol would have appeared much as those within the rustic shrines on the Mycenaean signets. To the right here is a characteristic feature which should not escape notice—a small oval peep-hole or 'squint' giving a view into one of the internal apses of the sanctuary.

In other cases the baetylic column still stands within a dolmen-like cell, of which it helps to support the roof slabs. An example of these cellular shrines is given in Fig. 67.¹ It will be seen that the top of the pillar is surmounted by two slabs, and there is a small interval between

¹ From a photograph taken by me in 1897.

them filled with earth, and most probably due to a slight subsidence of the pillar, a subsidence not shared by the upper or roof-slab, the two ends of which rested on the side walls of the chamber. It is further interesting to note that these pillars, the appearance of which through the opening presents such a striking resemblance to those of some of the Mycenaean shrines, have the same characteristic outline tapering towards the base, which has been shown to owe its origin to the necessities of such primitive stone structures. We have here in their typical aspect the 'Pillars of the House,' similar to those of the prehistoric chambered tombs and the primitive monuments of the Balearic Islands,¹ though the shaft in this case is in one piece—a transition to the Mycenaean form.

It is impossible in this place to enter into details as to the character of these Maltese monuments. It must be sufficient here to observe that the view, still widely held, that they were temples built by the Phoenicians,² is quite opposed to the archaeological evidence. The Phoenician letters engraved on the rock-floor of the Giganteja might (if they are genuine), give some grounds for supposing that the later Phoenician colonists in the island accepted and adopted a local pillar cult, which in many respects was parallel with their own. But the remains as a whole point to a much more remote period. The bucchero vase fragments, which abound within and around these Maltese monuments,³ show both in their paste and incised and punctuated decoration a distinct analogy with those of the Second Sikel Period of Orsi, from the opposite coast of Sicily,⁴ the date of which is approximately fixed by the imported Mycenaean relics with which they are associated.⁵ The window-like openings of the side-cells at Hagiar Kim and Mnaidra have already been compared with those of the Sicilian 'tombe a fenestra,' containing these allied ceramic types. It may be added that the spiral reliefs carved on some of the Sikel door-slabs from the cemetery of Castelluccio, and there recognised as due to Mycenaean influence,⁶ find their analogy in the spirally carved blocks of the Giganteja in Gozo. These ornamental blocks form the threshold and side blocks of a lateral apse or chapel which contains a pillar

¹ See p. 187.

² This view is repeated in Perrot et Chipiez, *L'Art*, &c. iii. p. 306. 'Enfin (ces monuments) nous fournissent des types authentiques sinon élégants et beaux de cette architecture religieuse des Phéniciens, dont nous savons si peu de chose.'

³ During a careful exploration of these monuments in 1897 I observed quantities of fragments of this class of pottery in and around the megalithic buildings of Malta and Gozo. A complete bowl of the same kind found at Hagiar Kim with incised scrolls and punctuations, mixed with chalky matter, is in the Museum at Valletta. Many fragments were simply adorned with punctuations like the decoration of the stones on a small scale; an indication of common origin.

⁴ Compare especially some bucchero pottery of this class from the cemetery of Molinello (near Megara Hyblaea) associated in one case with a fragment of imported Mycenaean pottery. P. Orsi, 'Di due Sepolcreti Siculi' (*Arch. Storico Siciliano*, N.S. Anno XVIII.) Tav. iii. and p. 14 *seqq.* One of these vases presents a double point of comparison with the Maltese examples from its combination of the incised linear and punctuated decoration.

⁵ Orsi, *Bullettino di Paleontologia Italiana*, 1889, p. 206 Tav. vii. 5, 9; 1891, p. 121; 'Necropoli sicula presso Siracusa con vasi e bronzi Micenei' (*Mon. Antichi*, ii. 1883), &c.

⁶ Orsi, 'La Necropoli sicula di Castelluccio,' *Bullettino di Paleontologia Italiana*, 1892, pp. 69, 70, Tav. vi.

idol, in this case of conical form. In the section of the Giganteja, drawn for La Marmara,¹ the baetylic cone is still shown in its place within a small dolmen-like cell; at present both the cell and cone are overthrown,² though the ornamental blocks in front remain in their places. The two side-blocks which look like altar stones are decorated with a tongue and double volute design, recalling the terminal ornamentation on one of the door-slabs of Castelluccio. The threshold blocks on the other hand are covered with returning spirals with lozenge-shaped interspaces (Fig 68), which point even more clearly than the Sicilian parallels to Aegean models, themselves the derivatives of Egyptian originals. We here in fact

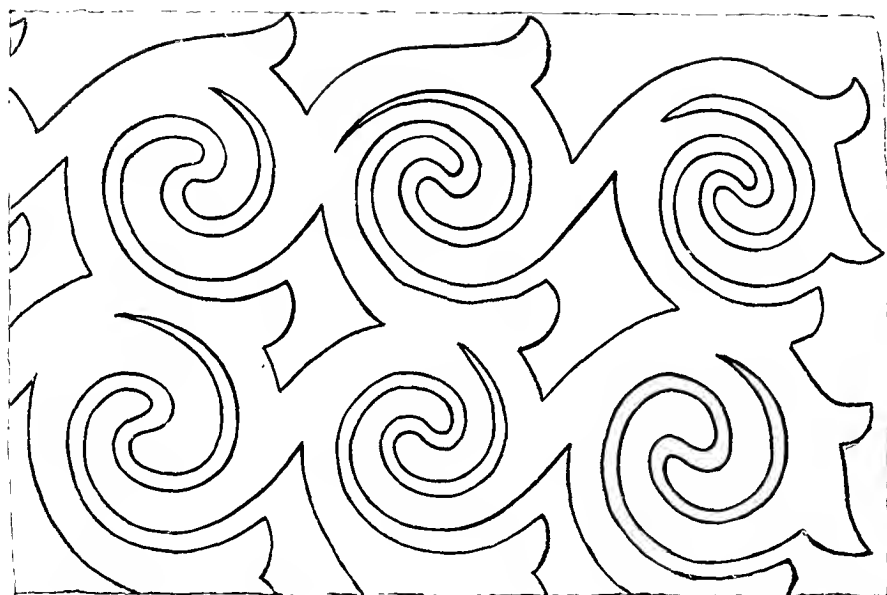


FIG. 68.—SPIRAL ORNAMENT ON THRESHOLD OF BAETYLIC CHAPEL, GIGANTEJA, GOZO.

approach very near the ceiling decoration of Eighteenth and Nineteenth Dynasty tombs.³

These sculptured blocks of the Maltese monuments must be reckoned among the later elements contained in them, yet some of them, like the altar with its foliated sides from Hagiar Kim, suggest parallels belonging to the earliest Mycenaean period, as represented by the vegetable motives on a gold cup from the fourth acropolis tomb at Mycenae, and the vases and painted stucco

¹ *Nouvelles Annales de l'Institut de Correspondance Archéologique* i. (1832); Perrot et Chipiez, *op. cit.* iii. p. 299, Fig. 222.

² The cone is broken in two.

³ It is possible that the Egyptian influence

here arrived by a Libyan channel, but it is more reasonable to refer it to the same Mycenaean agency that was undoubtedly at work on the opposite Sicilian coast.

fragments of Thera and Therasia.¹ The remarkable steatopygous female images found in the latter building, and absurdly called 'Cabiri,'² find a certain parallelism in the adipose marble figures from the prae-Mycenaean sepultures of the Aegean world,³ but their even more striking conformity with the figures from Naqada⁴ belonging to the prehistoric race of Egypt suggest in this case a still older Libyan tradition. The fundamental lines of these megalithic monuments themselves recall the neolithic chambered barrows, with terminal and lateral apses, as found throughout a large Iberic area and, still farther afield, in Britain and the Channel Islands.

We have here then unquestionably *in situ* in the Maltese islands the megalithic sanctuaries of an aniconic cult parallel to that of the Aegean world and of the Semitic lands to the east of it. But the parallel gains additional interest from the fact that we see the actual shrines of this primitive pillar-worship invaded with decorative motives apparently from a Mycenaean source. How far the externals of cult may have been influenced here in other ways from that quarter it is impossible to say. In any case we are brought very near that form of the Mycenaean pillar-worship, the shrines of which have already been compared with the simple dolmen cells still found in India. And what lends especial importance to the parallel is that we see the cone and pillar representatives of spiritual beings associated in the case of these Maltese monuments with structures that stand in a direct funereal relation. In spite of the absence of any adequate archaeological record of the excavations conducted at various times in these monuments there can be no doubt that they served in part at least a sepulchral purpose. The recorded discovery of a human skull in one chamber, the cists still visible in places superimposed on one another, the abundance of pottery, all point to this conclusion. We have here by all seeming the sanctuary of a heroic cult, in which the aniconic image that represented the Departed also marked the place of his last rest.

§ 30.—*An Oriental Pillar Shrine in Macedonia, and the Associated Worship.*

The attachment of the cult of sacred pillars to sepulchral religion as shown by examples from the Greek and Semitic lands, and again by the megalithic structures of the Maltese islands, still asserts itself in the baetylic worship, which has survived to our day under the cloak of Islam throughout the Mohammedan world. It has been already noticed that the mosque at

¹ These comparisons were pointed out by me in a paper read at the Ipswich Meeting of the British Association entitled 'Primitive European Idols in the Light of Recent Discoveries,' printed in the *East Anglian Daily Times*, Sept. 19, 1895. Cf. too, *Cretan Pictographs*, &c., p. 129.

² Caruana, *Report on the Phoenician, &c. Antiquities from Malta*, pp. 30, 31 and photo-

graph; P. et C., iii. p. 305, Figs. 230, 231.

³ See *Primitive European Idols*, &c. *loc. cit.* To the steatopygous female figures from Sparta described by Dr. Wolters (*Ath. Mitth.* 1891, p. 52, *seqq.*) may be added an example from Patcsia near Athens, now in the Ashmolean Museum.

⁴ Petrie, *Naqada and Ballas*, Pl. VI. Figs. 1-4, pp. 13, 14, 34.

Mecca, with its open court and sacred stone, itself preserves the essential features of the primitive Semitic temple. This taking over by the Prophet and his immediate followers of forms derived from the old Arabian stone-worship has singularly favoured the persistence of a kind of Moslem paganism. The Mohammedan lands are strewn with little Caabas, and the turbaned headstones of the 'Saints' Graves,' with which the adoration of such non-sepulchral pillars is closely bound up, must themselves be regarded as the anieonic images of a heroic cult. With changed names and under changed conditions the tomb of Adonis still rises beside the cone of Astarte.

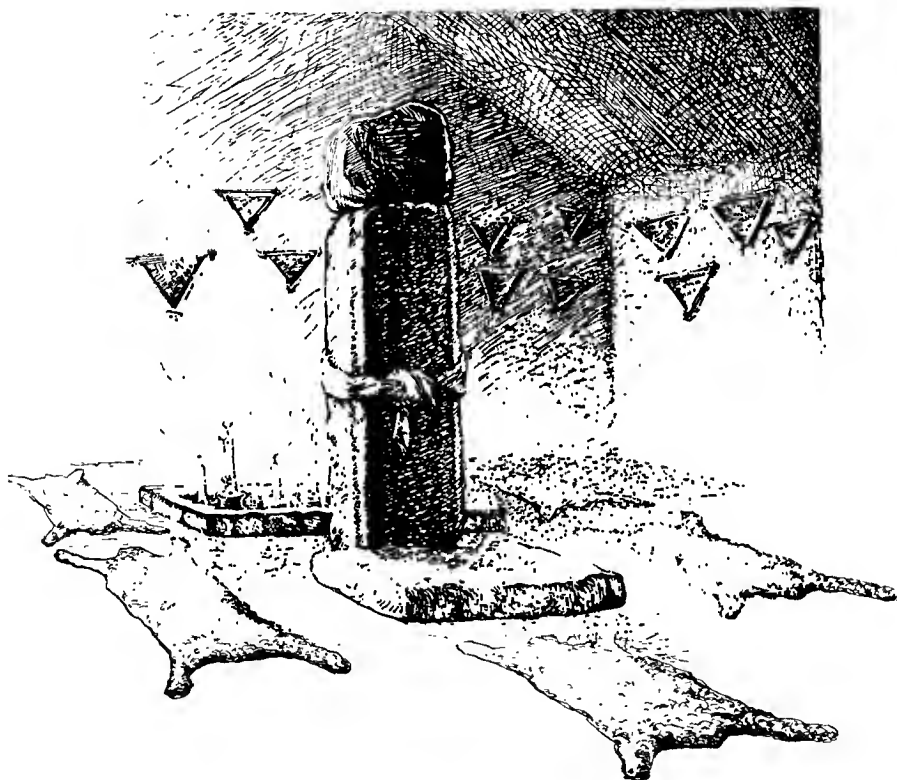


FIG. 69.—SACRED PILLAR IN SHRINE, TEKEKIOI, MACEDONIA.

But one result of these Mohammedan survivals is that the opportunity still presents itself, in the bye-ways of the East, of actually partaking in the observances of a baetylic ritual, which is in fact the abiding representative of the old Semitic stone-worship. Here and there, even, upon soil that was once Hellenic, the same oriental influence has brought back a local pillar cult essentially the same in character as that which flourished in the Mycenaean world, but which had already, in classical days, receded into the background before the artistic creations of Greek religion. A personal

experience may thus supply a more living picture of the actualities of this primitive ritual than can be gained from the discreet references of our biblical sources or the silent evidence of engraved signets and ruined shrines.

In the course of some archaeological investigations in upper Macedonia, I heard of a sacred stone at a Turkish village called Tekekioi,¹ between Skopia and Istib, which was an object of veneration not only to the native Moslems, but to many Christians from the surrounding regions, who made it an object of pilgrimage on St. George's day. In company with my guide, a Mohammedan Albanian, I visited the spot and found that the stone was contained in a two-roomed shrine under the charge of a Dervish. There was here, in fact, a mosque or '*mesjeda*' in the oldest sense of the word, as a shrine of pre-Islamic stone-worship, like that containing the pillar form of the God of Bostra.

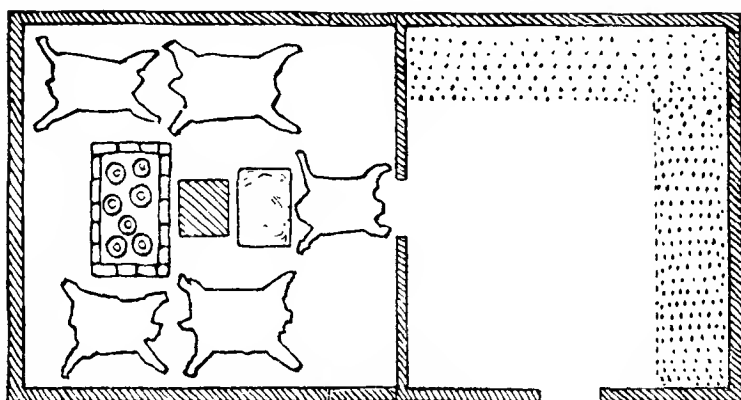


FIG. 70.—PLAN OF SHRINE, TEKEKIOI, MACEDONIA.

For the better understanding of the ritual employed, I went through the whole ceremony myself. A roomy mud-floored ante-chamber, made for the convenience of the worshippers, communicated by an inner doorway with the shrine of the stone itself. The 'holy of holies' within was a plain square chamber, in the centre of which rose the sacred pillar (Figs. 69, 70). Like the baetylic stones of antiquity, it might be said to have 'fallen from heaven,' for, according to the local legend, it had flown here over a thousand years since from Khorassan.² The pillar consisted of an upright stone of square section with bevelled angles about 6½ feet high and 1¼ feet thick, supporting another smaller and somewhat irregular block. Both were black and greasy from secular anointing, recalling the time-honoured practice of

¹ The name of the village (= Village of the Teke) in its Slavonic form is Tecino Selo. It lies in the hills a little north of the track from Skopia (Ūskub) to Istib, a short day's

journey from the former place.

² According to one account it was brought to its present position by a holy man from Bosnia.

pouring oil on sacred stones as Jacob did at Bethel.¹ On one side of this 'Niger Lapis' is a kind of sunken hearth-stone, upon which are set candlesticks of antique form for the nightly illumination of the stone—a distant reminiscence of the Phoenician candlestick altars and cressets, such as those seen on either side of the cone at Paphos upon some well-known coin-types. On the other side of the pillar is a small stone base, on which the votary stands for his prayers and ritual observances. The floor is strewn with the fleeces of sacrificed rams, and on the walls are suspended triangular plait-work offerings made of ears of corn, placed here by votaries who desire to draw forth from the Spirit of the stone a beneficent influence on their crops.

Taking his stand on the flat stone by the pillar, the suppliant utters a prayer for what he most wishes, and afterwards embraces the stone in such a way that the finger tips meet at its further side. A sick Albanian was walking round the pillar when I first saw it, kissing and embracing it at every turn.

The worshipper who would conform to the full ritual, now fills a keg of water from a spring that rises near the shrine—another primitive touch,—and makes his way through a thorny grove up a neighbouring knoll, on which is a wooden enclosure surrounding a Mohammedan Saint's Grave or Tekke.² Over the headstone of this grows a thorn-tree hung with rags of divers colours, attached to it—according to a wide-spread primitive rite—by sick persons who had made a pilgrimage to the tomb. The turbaned column itself represents in aniconic shape the visible presence of the departed Saint, and, conjointly with the thorn-bush, a material abode for the departed Spirit, so that we have here a curious illustration of the ancient connexion between Tree and Pillar worship.

In the centre of the grave was a hole, into which the water from the holy spring was poured, and mixed with the holy earth. Of this the votary drinks three times,³ and he must thrice anoint his forehead with it. This draught is the true Arabian *solwān*, or 'draught of consolation.'⁴

It was now necessary to walk three times round the grave, each time kissing and touching with the forehead the stone at the head and foot of it. A handful of the grave dust was next given me, to be made up into a

¹ Gen. XXVII. 18; XXXV. 14. See above, p. 132. Compare Robertson Smith, *Religion of the Semites*, p. 232, who illustrates the late survival of the practice by the 'lapis pertusus' at Jerusalem described by the pilgrim from Bordeaux in the fourth century of our era. 'Ad quem veniunt Judaei singulis annis et unguunt eum.' Near Sidon the practice of anointing sacred stones with oil—in this case strangely enough Roman milestones—goes on to this day; Pietschmann, *Geschichte der Phönizier*, p. 207. Theophrastus (16), makes the superstitious man anoint and worship smooth stones at the cross-ways. The practice itself is connected with the oriental custom of

anointing living persons as a sign of honour (cf. Psalm xlv. 7) which still survives in the case of kings and ecclesiastical dignitaries.

² Near it was a wooden coffer for money offerings.

³ It is permitted to drink it through a cloth or kerchief.

⁴ Robertson Smith, *op. cit.*, p. 322. N. 3 remarks that this draught 'that makes the mourner forget his grief, consists of water with which is mingled dust from the grave (Wellhausen, p. 142), a form of communion precisely similar in principle to the Australian usage of eating a small piece of the corpse.

triangular amulet and worn round the neck. An augury of pebbles, which were shuffled about under the Dervish's palms over a hollowed stone, having turned out propitious,¹ we now proceeded to the sacrifice. This took place outside the sepulchral enclosure, where the Priest of the Stone was presently ready with a young ram.² My Albanian guide cut its throat, and I was now instructed to dip my right hand little finger in the blood and to touch my forehead with it.

The sacrifice completed, we made our way down again to the shrine, while peals of thunder rolled through the glen from the Black Mountain above. It was now necessary to divest one's self of an article of clothing for the Dervish to wrap round the sacred pillar, where it remained all night. Due offerings of candles were made, which, as evening drew on, were lit on the sunken hearth beside the stone. We were given three barley corns to eat, and a share in the slaughtered ram, of which the rest was taken by the priest, was set apart for our supper in the adjoining antechamber. Here beneath the same roof with the stone, and within sight of it through the open doorway, we were bidden to pass the night, so that the occult influences due to its spiritual possession might shape our dreams as in the days of the patriarchs.

ARTHUR J. EVANS.

¹ The hands were separated, still palms downwards, and the numbers of the pebbles under the right and left hand respectively were then counted.

² Near him was a kind of low gallows from

which was suspended a three-pointed flesh-hook for hanging up the meat. This flesh-hook had to be touched three times with the tip of the right hand little finger.

SUPPLEMENTARY NOTE.

The views expressed in the present study with regard to the character of Mycenaean worship, and such external features as the baetylic pillars within the shrines and the 'horns of consecration,' were first put forth by me in a paper on '*Pillar and Tree Worship in Mycenaean Greece*,' read in the Anthropological Section of the British Association at Liverpool in 1896. A short abstract of this was published in the Annual Report of the Association. In November 1899, the part specially affecting Dr. Reichel's theory of the '*Thronkultus*,' was read to the Oxford Philological Society. It had been my original intention to incorporate the present study in a work, in course of preparation by me, on the Mycenaean gems and signets, but the fresh evidence supplied by the Cretan discoveries has induced me to put it forth in a separate form. This seemed the more desirable since the most recently expressed views on the subject, as for instance those contained in Dr. H. von Fritze's essay '*Die Mykenischen Goldringe und ihre Bedeutung für das Sacralwesen (Strena Helligiana, p. 73 seqq.)*,' though in certain respects supplying a welcome corrective to Dr. Reichel's system, still, as I venture to think, betray a very imperfect recognition of some of the most essential features of the cult. So far, on the other hand, as my own views are confirmatory of those expressed by Dr. von Fritze in the paper above cited, by Dr. Wolters in his remarks on the Knossian fresco, and again by Dr. Furtwängler in his monumental work on Ancient Gems, they have at least the value of having been independently arrived at.

EDITORIAL NOTE.—Owing to the author's absence abroad, this article has not received final revision at his hands.

THE RECENT FINDS OFF CYTHERA.

BELIEVING that some account of the statues recently discovered in the sea near Cythera may be of interest to the readers of the *Journal of Hellenic Studies*, I have the honour to send the following particulars.

The discovery was made by sponge-divers, who informed the Greek Government that a number of bronze and marble statues, which had evidently formed the cargo of a shipwrecked vessel, were lying at the bottom of the sea near the island of Cythera (Cerigo) and not far from Cape Malea.



FIG. 1.



FIG. 2.

The Government sent two ships of the Greek Navy to the spot; with their aid the divers have brought to the surface a number of statues, some intact, some much injured by the action of the sea-water, and some in fragments. They have been brought to Athens and will in due course take their place among the treasures of the National Museum. Some of them, it is not too much to say, may claim a prominent position in the history of Greek sculpture.

The principal pieces are as follows :

(1) Fig. 1.—Bronze statuette of a youth, 22 inches high. The lips, which were made of some finer material, are lost. I venture to assign this figure to the second half of the fifth century. The attitude, the harmony of its proportions, above all the shape of the head, recall what we know of the style of Polyclitus. In certain respects it resembles the statue at Florence known as the *Idolino*.



FIG. 3.

(2) Fig. 2.—Another bronze statuette of a youth, somewhat smaller than that just described. It betrays the influence of Polyclitus, but appears to be of a somewhat later date.

(3) Not photographed.—Bronze statuette of a woman, dressed in Doric chiton with diploidion. The head is missing. The severe style points to the fifth century.

(4) Figs. 3 and 4.—Bronze statue of rather more than life-size. This is an admirable work of the fourth century, destined, it may be, to

rank as high among statues of bronze as does the Hermes of Praxiteles among those of marble. It was found in fragments, as the photographs show; but these fit together and it will be possible to reconstruct the whole. The beautiful face is uninjured. I am inclined to interpret it as representing Hermes. The action of the hands tells us very little. The left, which hangs by the side, is almost closed but may have held some slender attribute. The raised right hand seems to have held some round object, perhaps a ball, in which case the statue would represent an *ephebos*. But the original intention matters comparatively little. Whether it represents Hermes or a young athlete, there can be no question of its surpassing artistic merit. It will be admitted that this is the most beautiful bronze statue that we possess, and that it gives us for the first time an adequate idea of what bronze statuary was in Greece and in the fourth century B.C.



FIG. 4.

(5) Not photographed.—Feet and arms belonging to at least four other statues, all in bronze and all life-size.

(6) Not photographed.—Bearded head, bronze, life-size. It has the same bruised and swollen features as the well-known head of a pancratiast found at Olympia. With it there was recovered a hand and wrist wrapped in a caestus of leather straps arranged in the same way as those on the hand of the seated boxer in the Museo delle Terme at Rome. We have therefore to do with the statue of a boxer, dating probably from the Alexandrine period.

(7) Fig. 5.—Marble statue of a youth, life-size. The crouching attitude has been explained as that of a combatant guarding himself with his left arm or of a wrestler about to grapple with his opponent. What seems a fatal objection to both these views is that the right hand hangs inactive while the left is in vigorous action. A wrestler or a combatant would have his right hand raised and ready for action, like the hands of the well-known statue of a boy from Nero's Villa at Subiaco, a statue which in

other respects has somewhat the attitude of ours. The only satisfactory explanation that I can find is that the youth is shading his eyes with his left hand and gazing into the distance. Our National Museum possesses a statue of a Satyr, found at Lamia, with the hand in this position, and this, I believe, was the attitude of the Satyr ἀποσκοπεύων of the painter Antiphilos, to which Pliny refers. The face has a singularly *naïf* expression. Anatomical details are carefully worked out. I am inclined to ascribe the

statue to the Asiatic School which culminated in the Schools of Pergamon and Rhodes, and to suppose that it formed part of a group.

(8) Lastly, the divers have recovered fragments of timber and even the anchor of the sunken vessel, pieces of a throne made of wood plated with bronze and inlaid with silver, and a variety of minor objects.

As to the period when this valuable cargo was lost, the presence of so many bronze statues makes it certain that the wreck took place not later than Roman times, for in the Middle Ages no bronze statues survived on Greek soil. On the other hand, these were not newly manufactured bronzes lost on the way to their original destination, for the masses of lead which had served to attach them to their pedestals are still adhering to their feet. This fact makes it probable that they had been wrenched from their pedestals, presumably after

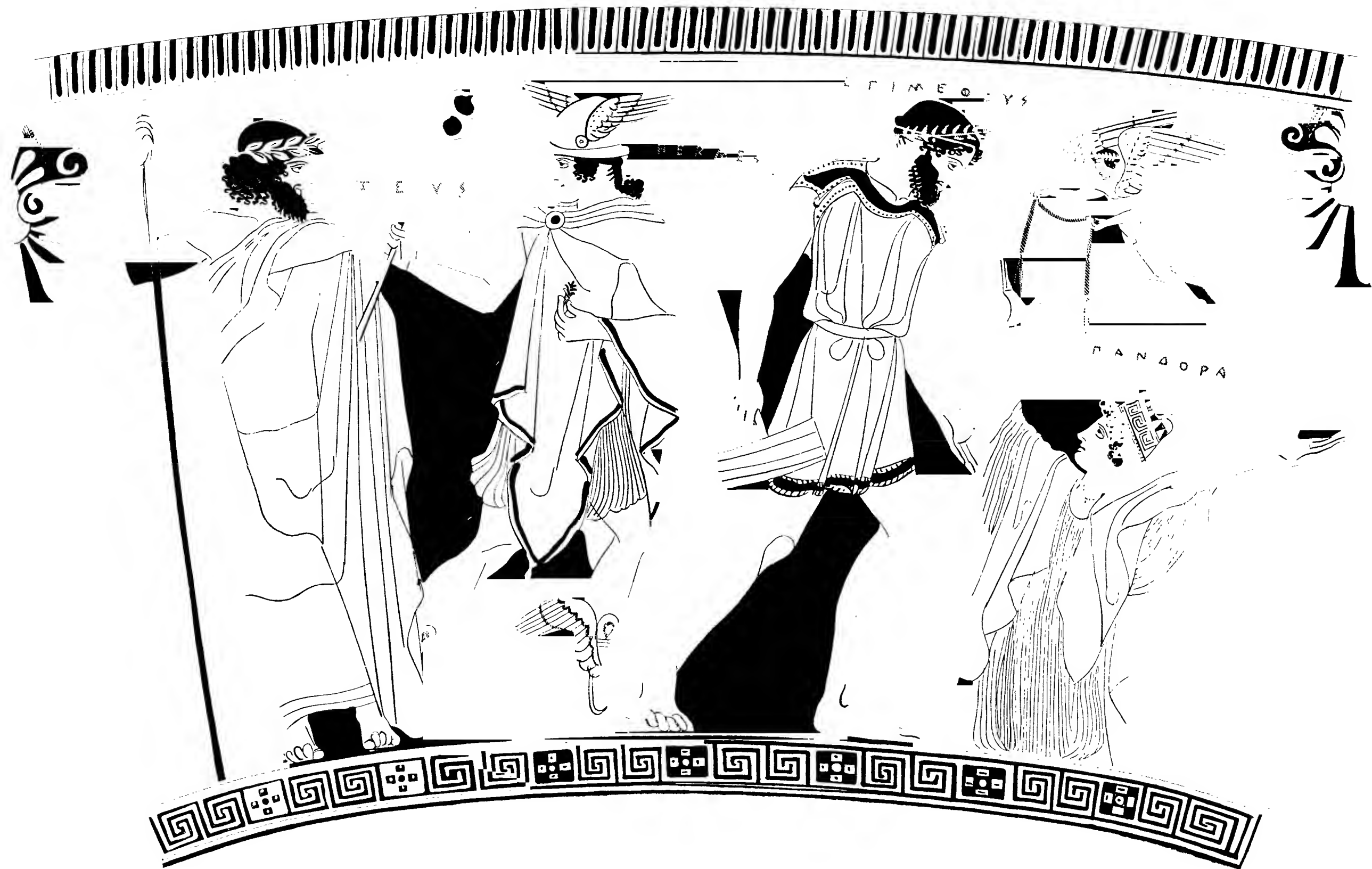


FIG. 5.

the Roman conquest, and were on their way to Rome, whither so many other statues were carried during the period of Roman domination. One might suppose that they were some of the statues which Cassius carried off from Rhodes after sacking it in 43 B.C.; or, with more probability, that they were a part of the plunder collected by Sulla, for Lucian in his *Zeuxis* mentions that a ship laden with works of art which Sulla was conveying to Rome had foundered off Cape Malea.

Such are the statues which the sea has given back to us after entombing them in its depths for nearly two thousand years.

P. KARRADIAS.



THE BIRTH OF PANDORA



THE HERA OF POLYCLEITUS



5



6



7



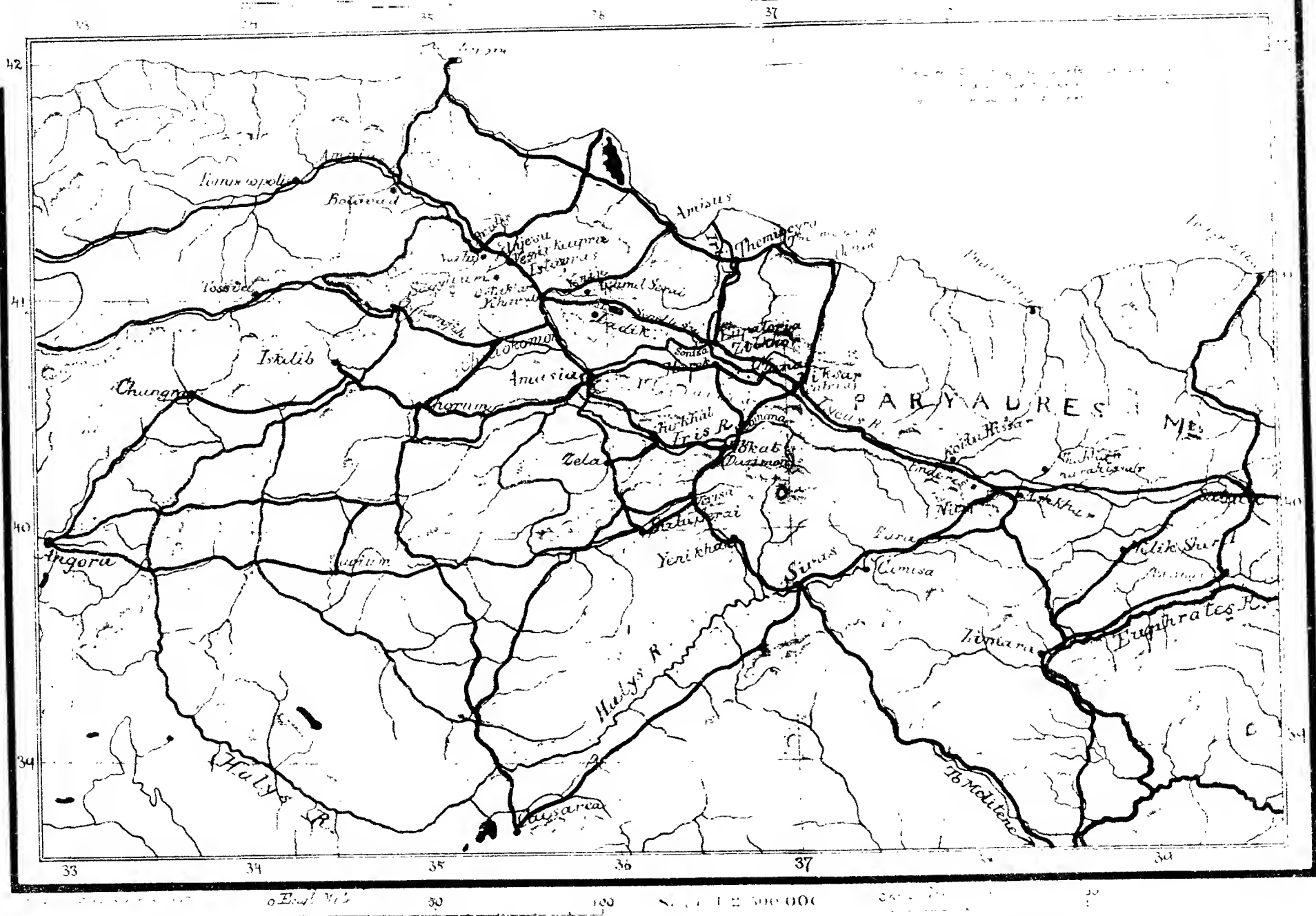
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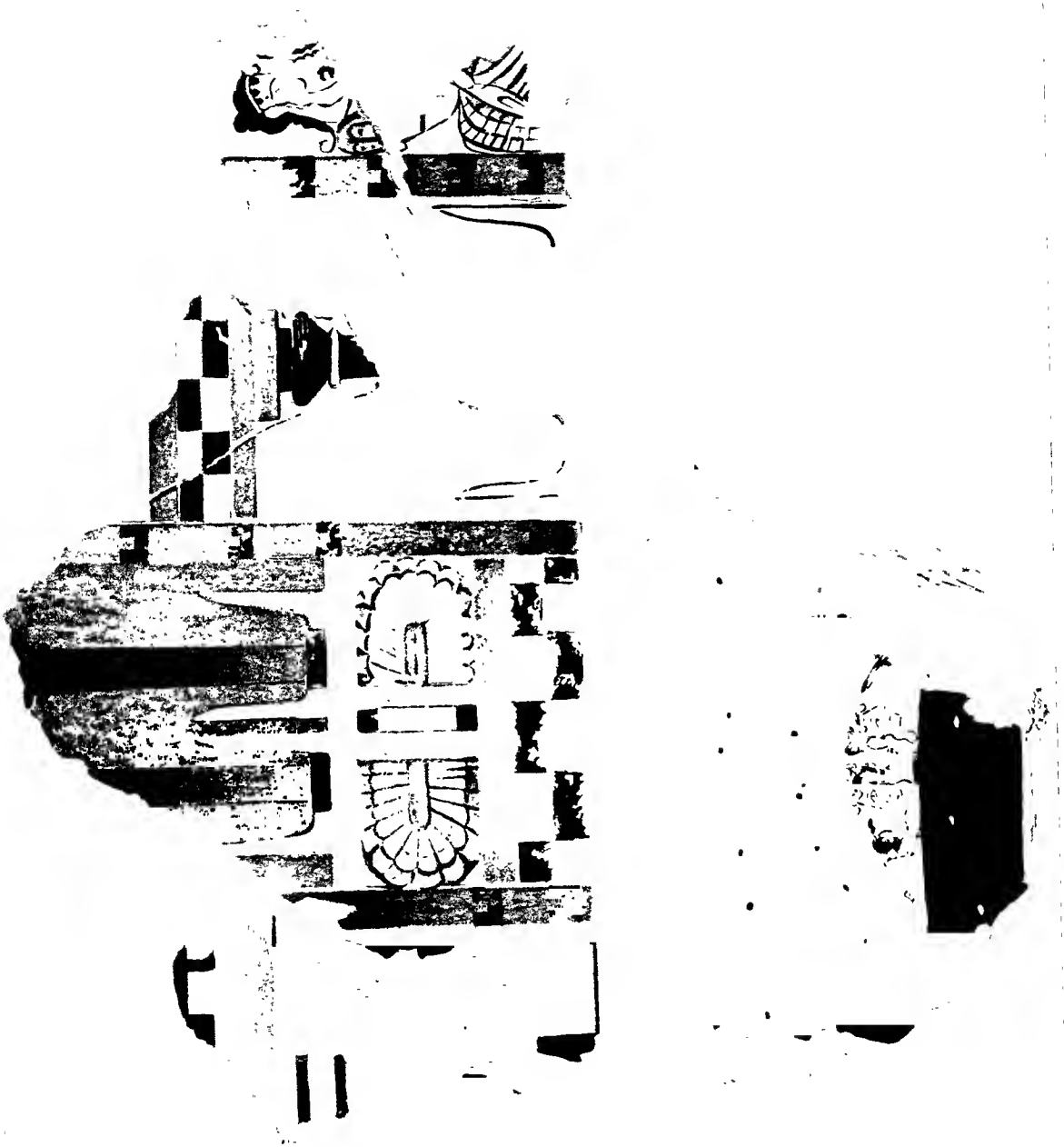


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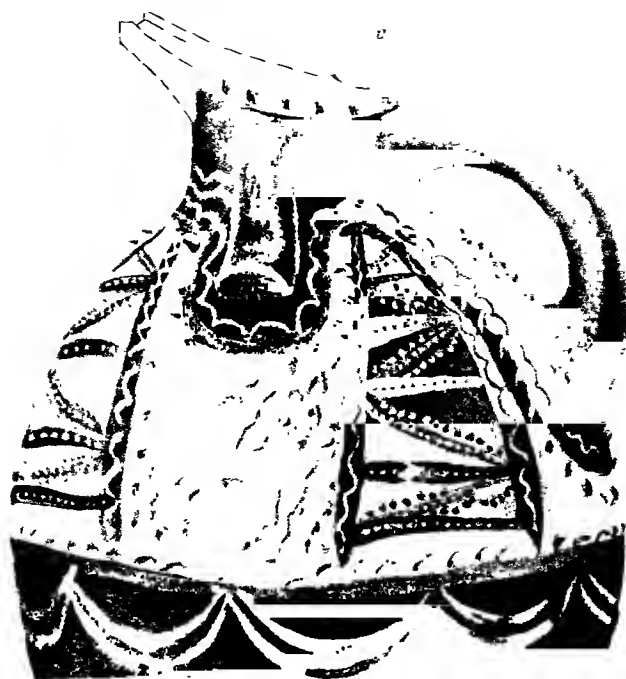


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Fresco representing façade of MYCENAEAN TEMPLE.



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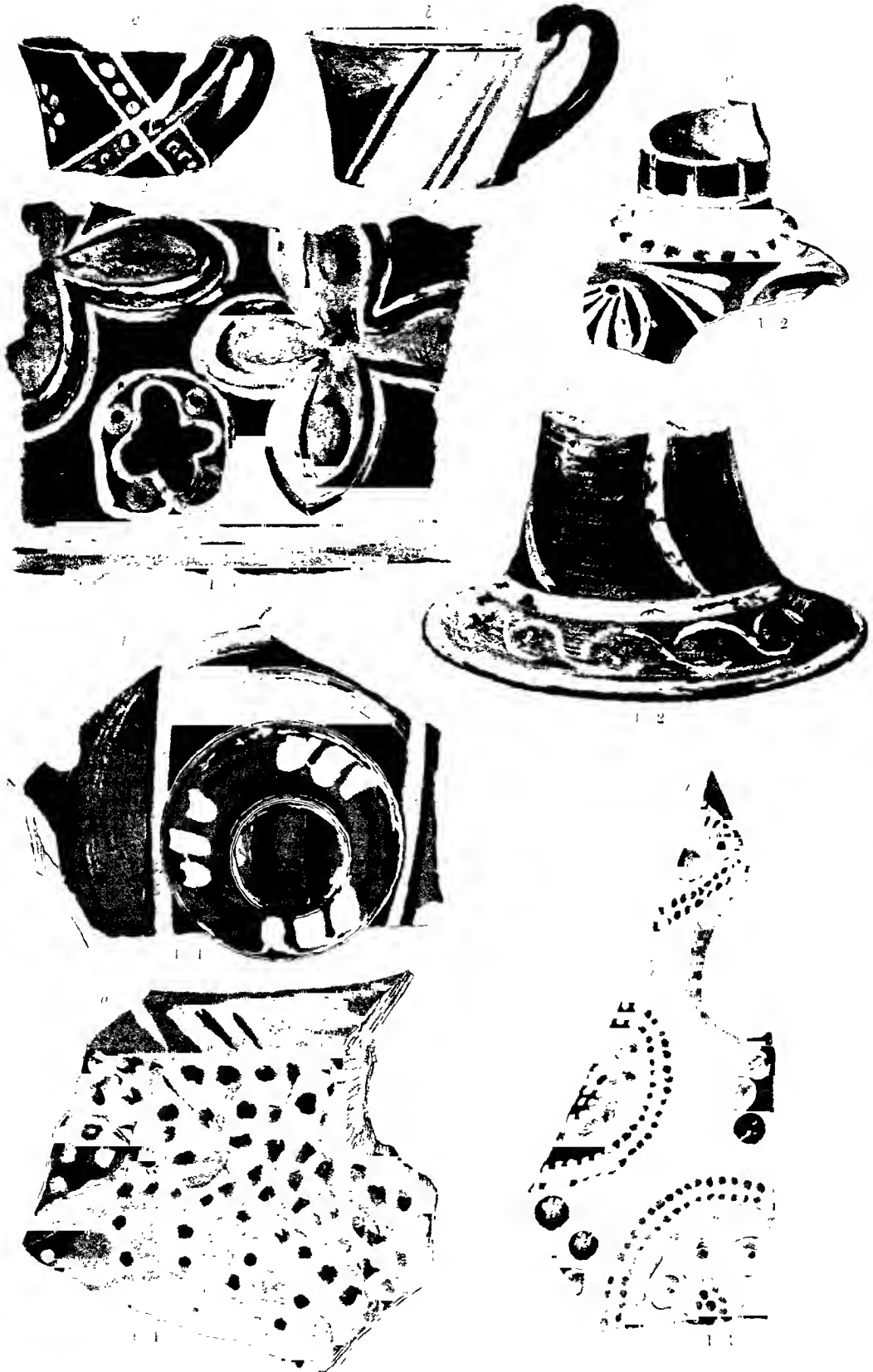


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1 2

PRIMITIVE CRETAN PAINTED WARE.



PRIMITIVE CRETAN PAINTED WARE

ANCIENT SCULPTURES AT CHATSWORTH HOUSE.

[PLATES VIII.—XVII.].

THE treasures of modern art preserved in Chatsworth House are well known to writers on the history of art. But of the small and choice collection of works of ancient sculpture contained in this fine mansion, the property of the Duke of Devonshire, information has up to now been almost entirely lacking to archaeologists. I myself have to thank the Duke's librarian, Professor Arthur Strong, for calling my attention to it, and for the opportunity of inspecting the collection in the autumn of 1895.

A description of the most important work, the bronze head of Apollo, an original of about B.C. 460, appeared in my book, *Intermezzì, kunstgeschichtliche Studien* (Leipzig, 1896), Plates 1-4, pp. 3 f. An interesting Roman relief has been published by E. Petersen in the *Römische Mittheilungen* (1899), Plate 8, pp. 222 f. I have also written a short notice of the whole collection in the treatise *Ueber Statuenkopieen im Alterthum*, I. (1896), p. 26. That I am now in a position in this paper to enter into more minute details with the help of photographs I owe to the kindness of Prof. Arthur Strong, (who was good enough to supervise the taking of the photographs), as well as of the editors of this Journal, to all of whom I must express my warmest thanks.

It will be most convenient to survey the little collection in chronological order. The preparation of a complete catalogue was unhappily impossible in the time at my disposal. I must therefore pass over the more trivial points and can only dwell on those more important ones on which I then concentrated my attention.

A.—STATUES AND HEADS.

In the first place, both chronologically and in respect of importance, stands the bronze head mentioned above and published by me in *Intermezzì*. The accompanying Fig. 1 is reproduced from Pl. II. of that work.

Hardly more than ten or fifteen years later must have been produced the original of the following beautiful head :—

(1) **Bearded Herm** of white marble, somewhat over life-size (Pl. VIII.). Only the tip of the nose and the shaft are restored ; but the neck with the locks of hair falling on the shoulders and the junction of the Herm are

antique. The hair is confined by a round twisted band; it is quite short behind, where it is scarcely finished at all. In front, on the other hand, it is finished with great care. In the middle, over the forehead, is a parting, from which the hair is strongly waved towards the sides. Short locks fall in front of the ears. But as the hair towards the back is, as I have said, quite short, a puzzling effect is produced by two long locks curled in the fashion of



FIG. 1.—BRONZE HEAD OF ABOUT B.C. 460.

old bronze work, which fall behind the ears on to the breast. They produce a strange impression and are not in keeping with the rest of the treatment of the hair. It may therefore be conjectured that they are an addition of the copyist, who copied the head as that of a Herm; for in the case of Herms these locks on the shoulder are wont to be a characteristic feature. If this supposition is correct, then the original was not a Herm at all, but the head of a statue.

I do not know any replica of the head, and Dr. L. Curtius, who has devoted special and detailed study to the heads of Herms of this type and will shortly publish a work upon them, assures me that he, too, has no knowledge of any replica.

This fact makes this beautiful head the more precious; for it reveals again, in the work of a good and faithful copyist, an original which must have owed its existence to the circle of Myron and Pheidias about the date 450, or very soon after. The way in which the hair over the forehead is arranged from the parting towards the sides recalls the so-called Cassel Apollo. Allied to it is a head in the British Museum published by me in *Meisterwerke d. griech. Plastik*, p. 395, Fig. 58, and by Arndt, *Denkmäler*, No. 517. But the latter has features belonging to a somewhat earlier period than the Chatsworth head; it still possesses the low forehead of the more severe style, and the old-fashioned plaits wound round the head. Allied again, the arrangement of the hair on the forehead being the same, is the bearded head on a statue of Asklepios—it is a head of the god but does not belong to the statue—which stands in the garden of the Villa Borghese, and which Amelung will shortly publish. This Borghese head, however, is rough and clumsy and deficient in that wealth of finer workmanship which our head exhibits. But nevertheless the Borghese head is closely allied to it. We may further compare with it a head set on a Herm which I have seen at a dealer's and which has the hair similarly parted and curled over the forehead, and the forehead similarly modelled, but displays a shorter beard, parted in the middle, and is altogether inferior to ours and less dignified in expression. Both the heads with which comparison has been made have short hair behind falling in simple curls. There is a third work with which it may be compared, though the comparison is somewhat less close—the beautiful Asklepios at Dresden¹; it, too, has the hair parted over the forehead, but the hair which falls to the sides does not curl in the same way as in the other examples; the parting, too, is wanting behind the front hair; the whole of the head is here covered with a confused wealth of curls.

All these works go back to the time of Pheidias's prime, or of the later works of Myron. Amid these surroundings at Athens must have been created the original of our beautiful head, which has all that reposeful and majestic expression which characterises the heads of gods produced at that period.

The various inequalities of the forehead are finely modelled; above the eyes at their outer corners it again projects. The forehead, like the hair, recalls the Myronian Cassel Apollo. The eyebrows are sharply defined, and the lids strongly marked, general characteristics of the style of the time. The lips are slightly open. The beard displays a regular arrangement of curls in the same style as the hair of the head; its treatment shows the plane surfaces characteristic of the more archaic fashion, the front and sides

¹ Treu, in the *Festschrift für Brandorf*, Plates 2, 3; the appellation 'Zens' I do not consider correct.

forming clearly defined areas. In the Dresden Asklepios the beard already displays more roundness in its treatment.

(2) **Head of the Doryphoros of Polykleitos** in white marble, on a bust (dating from the time of the Renaissance) of yellowish variegated marble (Fig. 2). The head is fairly well preserved with the neck; the nose



FIG. 2.—HEAD OF DORYPHOROS.

is restored. It is a mediocre copy which does not enter into the finer details; still it gives the main features correctly without the introduction of any foreign element.

(3) **Head of Alexander the Great** (Pl. IX., X.) of white marble, above life-size (the face is nine inches long). This head, after the archaic Greek head of Apollo, is certainly the most remarkable work in the collection. It represents Alexander under an entirely new and very important type. The conception of the great king is a highly idealised one, so much so

that at first sight there is no suggestion of a portrait. But a closer examination allows of no probable interpretation other than the one which connects it with Alexander. The only parts of the head which have undergone restoration are the forepart of the nose, a small piece of the right half of the lips, and the lower part of the neck, with the bust.

The head is turned towards its right. There is a round fillet in the hair; behind this the hair lies smooth and close on the upper part of the head, and is arranged from the centre outwards. But in front of the fillet is a crown of thick curls which frames the face and falls as far as the neck. In the middle above the forehead the hair stands up stiffly in two locks, the ends of which fall down on either side. Now it is just these two standing locks of hair which are an especially characteristic feature of the best and most certain of the portraits of Alexander. Thus the well-known inscribed Herm in the Louvre (Arndt, *Portraits*, No. 181) displays these two locks, in essentials just as on our head; the only difference is that in the Chatsworth head they are combined with a thick wealth of curls, whereas in the former the accompanying hair is smooth, in accordance with the reality. That these two locks rising from the middle of the forehead were a peculiarity of the real Alexander is testified by the Herm in the Louvre. The fine head, too, in the Capitol, which I conjecture to be a copy of the Lysippean Alexander with the spear,¹ has these two upstanding locks; only the ends of both are here turned in the same direction. There are yet other heads of Alexander which show, with different variations, the same locks rising above the middle of the forehead, but they are of less importance, just as their authenticity is less assured. Without doubt this characteristic feature is that to which the ancients called attention as the leonine ἀναστολή (Plutarch) and the ἀνασεύρθαι (Aelian) of his hair.

The Herm in the Louvre combines with this characteristic, as I have already remarked, a sober truthfulness in the representation of the rest of the hair and the features of the face. In other examples, however, the head is idealised and approximates more and more closely to the types of the great gods. The crown of thick curls, which frames the face and falls as low as the neck, is an especial characteristic, very general in the fourth century, of the great divinities like Zeus, Poseidon, and Apollo. It was transferred to the deified Alexander. The Capitoline head still combines this ideal wealth of curls with thoroughly individual features of the face²; other heads of Alexander, on the contrary, unite to this wealth of hair ideal features very much generalised; this is the case *e.g.* with the Barracco head,³ one in

¹ Cf. *Berl. Philol. Wochenschr.*, 1896, p. 1516. The contrary view is maintained by O. Wulff, *Alexander mit der Lanze*, Berlin 1898, p. 57. The Nelidow statuette probably goes back to the statue of Lysippos; but naturally—for nothing else can be expected with a small bronze statuette of this kind—this is only a free and approximate reproduction of the

original. It can very well be connected with the Capitoline head, which—and this is the point—has the same attitude and inclination.

² The replica of the Capitoline head which Hefbig has published in *Monumenti Antichi*, vi. 1, is probably not ancient at all.

³ *Monum. Antich.* vi. 3. Arndt, *Portraits*, Nos. 477, 478.

Copenhagen¹ and others. The admirable Campana Alexander in the Louvre² again, stands nearer to the reality.

The Chatsworth head will henceforward stand in the first rank among the portraits of Alexander. The question as to the artist to whom it may be referred can unhappily receive only a very vague reply. The only thing that can be considered certain is that it does not belong to the school of Lysippus. Besides the Herm in the Louvre only the Capitoline head has in my opinion any claim to be attributed to Lysippus. The Chatsworth head corresponds much more closely to the ideal Attic style, which must have prevailed in the school of the artists Leochares and Bryaxis. It especially calls to mind the works which are usually attributed to Leochares, having in common with them an animated beauty which is characteristic of that master.

In the endeavour to assign all the manifold received portraits of Alexander to individual artists, there is a tendency to forget that in very truth the great masters like Lysippus in particular, and after him Leochares, in their different representations of Alexander, may themselves have shown great diversity. Just as in our own time the numerous portraits which a Lenbach has made of Bismarck will differ greatly between themselves, so too must Lysippus's portraits of Alexander have differed. And Leochares, too, we may suppose, was commissioned to represent the great king more than once. We must remember how enormous the demand must have been for statues of Alexander. We need not therefore wonder at finding in our storehouse of monuments more than one Alexander who makes us think of Leochares.³ Nevertheless the accepted heads of Alexander are so manifold and diverse that they must presuppose a somewhat large number of unknown artists.

Among these is one who, following the relatively older method, has given us Alexander as quite youthful, with a certain quiet simplicity of style, but still strongly idealised. His work has come down to us in several copies, of which one was found on the Akropolis at Athens.⁴ I am inclined, more or less, to attribute it to Euphranor.

Probably on no other head of Alexander is the idealised profusion of hair so wealthy and beautiful as on the splendid head at Chatsworth.

(4) **Head of Hermes** (Pl. XI., XII.), of white marble. Length of face 18 cm. The end of the nose, both lips and the bust are restored.

The identification is rendered certain by the two small wings projecting out of the hair; these are quite ancient. Hermes is represented as the tutelary deity of the Palaestra; his ears are swollen with boxing, and his hair, which is in crisp curls, is cropped quite short, as befits a youthful athlete;

¹ Arndt, *Portraits*, No. 472.

² Torso with head intact; d'Escamps, *Marbres Campana*, Pl. 50; Sal Reinach, *Repert.* ii. p. 568, 1.

³ The gold and ivory statue in the Philippeon at Olympia was, however, scarcely copied at all.

⁴ 'Εφρημεῖς ἀρχ. 1900, πιν. i. Arndt, *Griech. Portr.* Nos. 475, 476. Arndt has recognised that the head in Eibach (Arndt, Nos. 473, 474) is a replica; and Klein has recognised in the Berlin head, *Sculpt.* No. 329 (Klein, *praxitel. Studien*, p. 51, Fig. 14), a replica of the Athenian one.

it stands up in tiny curls over the forehead: the spring of the hair is very finely and delicately treated. The lower part of the forehead projects strongly. The eyes are extraordinarily deep-set, and the lids are comparatively slightly open, so that the eyes appear small.

This athletic type of Hermes is approached most nearly by the head (still intact on its Herm) in the Villa Albani (No. 52), bearing the ancient inscription ΕΡΜΗC. But the build of this Herm is sturdier, broader and more robust; the wings too on the head are wanting.

The Albani Herm, like the Chatsworth head, goes back to an original of the fourth century, and seems to stand in close relation to the style of Skopas. Nevertheless the type can be traced back to the fifth century; the Hermes statue in the Vatican with the inscription 'Ingenni,' in the style of Myron,¹ already shows a type of head which must be described as the direct precursor of the one here described.

The little wings on the head may have been added by the copyist, but they may also have belonged to the original. An Attic vase-painting of the time of the Peloponnesian War,² is probably the oldest original Greek work of art at present known, which represents Hermes with the wings springing directly from the hair.

The Chatsworth head is an admirable piece of work as a copy, reproducing very faithfully the peculiar deep-sunken eyes, the carefully modelled forehead and the delicate spring of the hair. The combination of the characteristics of bodily strength and athletic power with the spiritual expression of restless and unsatisfied endeavour and all-conquering energy, is thoroughly identified with the tendency represented by Skopas; which, however, was doubtless followed by many artists in Athens.

(5) **Head of Dionysos** of white marble, a little over life-size (Fig. 3). A female bust has been wrongly restored. Otherwise only the nose, the hair on the shoulders and a small piece of the ivy wreath have been restored.

The head is a good replica of a type known to us through two examples, which have preserved the whole of the figure appertaining. The head agrees so closely with that of the beautiful Madrid statue of the leaning Dionysos,³ which I have shown to be Praxitelean (*Meisterwerke*, p. 571), that it can only be regarded as a copy after the same original. But the statue in the Louvre, known as the Richelieu Bacchus,⁴ is also only a replica, although it can only be recognised as such by a careful comparison. For the copyist who executed this statue in the Louvre had a certain peculiar affected and exaggerated style of execution, resulting in a garbled reproduction of the original, so that his work at first sight makes a very different impression from the Madrid statue.⁵

¹ Cf. *Meisterwerke d. griech. Plastik*, p. 360 f.

² Furtwängler-Reichhold, *griechische Vasen-maleri*, Pl. 20.

³ Clarac, Pl. 690 B. Friederichs-Wolters, *Gipsabgüsse*, No. 1485. For the photographs which will shortly be published I have to thank

the kindness of P. Arndt.

⁴ *Catal. sommaire*, No. 87. Clarac, Pl. 272, 1570. Photographie Gnaudon, No. 1188.

⁵ Amelung is wrong in his assertion in Arndt-Amelung, *Einzelstudien*, No. 1142, that the Madrid and Paris statues go back

Dionysus is standing on his right foot, resting the left which is drawn back, and supporting his right arm on a prop.¹ The head is inclined backwards and turns outwards to its left. The soft rounded form of the neck is also preserved in our specimen, and caused by its effeminate form the erroneous restoration of the bust. The whole attitude is one of complete repose



FIG. 3.—HEAD OF DIONYSOS.

and delightful abandon: all tension is relaxed; a delicious sense of enjoyment pervades the whole figure, the lines of which are rounded in the most wonderfully harmonious fashion. The work is, it seems to me, purely Praxitelean in spirit, and must be traced back to the great master himself.

to two different originals; the difference originated only with the copyists. Amelung makes a further error when he instances the statue of the Palazzo Colonna, *Einzelaufn* No. 1112, as a 'composition' of the same 'type' as that represented by the Madrid and Paris statues. The Colonna statue has nothing in

common with these; its whole attitude is different: the god is not here leaning on anything; and the way in which he holds his head and his body is entirely different.

¹ In the Madrid example a Herm, in the Paris one a vine-encircled tree-trunk.

On the hair is the Bacchic mitra which hides the spring of the hair over the forehead.¹ A thick wreath of ivy shades the head. The hair is parted in front, and, as on the Praxitelean female heads, is smoothed towards the sides in simple waves. Behind the ears, locks fall to the shoulders; the rest of the hair on the left side has, in our head, been wrongly restored. Behind, a long tress fell down the back, as we learn from all the completely preserved statues; this is lost in our specimen.

Owing to its delicate workmanship this Chatsworth head is at least equal—nay, superior—to the Madrid specimen: in particular the mouth and the eyes seem in it to be copied in a more careful and lifelike manner than in the other case. The Paris specimen, owing to its mannered workmanship, which seeks to impose upon the Praxitelean head the hardness of fifth century bronze technique, is so far removed from the original that it need not concern us here.

6. **Statue of Apollo** (Pl. XIII.), under life-size, in white marble. The arms with the lyre are modern; on the head, which has been re-attached but appears to belong, the nose is restored.

Overbeck in his collection of the representations of Apollo could only instance two bronze statuettes of the type exhibited by this marble figure at Chatsworth, *i.e.*, with crossed legs, the left fore-arm supported, standing on the right foot, naked, with the right arm placed above the head. One of these statuettes, formerly in the Gréau Collection, is now in the Louvre,² the other, according to Overbeck, in Bologna.³ We have here evidently a later modification of the well-known type of the reposing Apollo,⁴ which goes back to Praxiteles. The plait over the crown of the head of the Chatsworth figure is taken from the original type. But the body shows greater softness and roundness than that of the original creation.

7. **Youthful Male Head** (Fig. 4), of white marble, of which the neck is preserved, but set on a modern draped bust. The nose and chin are restored. The head, with the mouth slightly open, reminds me somewhat of the Niobid types, although it is very different from them. The original belonged in any case to the fourth century. I am not acquainted with the type elsewhere, and do not venture to conjecture to what statue it may have belonged.

8. **Portrait Statue of a Man** (Pl. XIV.), somewhat over life-size, of white marble.

This statue, together with the following group No. 9, was found near Apt, in Provence ('dans le territoire d'Apt en Provence'), as Montfaucon remarks in the third volume of the *Supplement* (published in 1724) to his great work, '*Antiquité Expliquée*,' p. 11 ff., where both statues are represented on 'Pl. I. après la 4. planche.'⁵ According to his account they were dis-

¹ Cp. *Sammlung-Suboutroff*, text to Pl. 23.

² Frohner, *Bronzes antiques, coll. Gréau*, Pl. 21, No. 944; Sal. Reinach, *Répert. de Stat.* ii. 95, 2, 3.

³ Overbeck, *Apollo*, p. 217, No. 28, 29.

⁴ *Meisterwerke*, p. 570. *Masterpieces*, p. 337, 2.

⁵ Reproduced in Clarac, Pl. 952 A=Sal. Reinach, *Répert.* i. p. 606: in his text p. lxiv. Reinach adds the question, '*ubi nunc?*' The

covered shortly before, that is shortly before 1724; '*haud ita pridem*' is the statement in the Latin text. The Marquis de Caumont, at Avignon, had sent drawings immediately after the find to the scholar Montfaucon, and 'le Bret, first president of the parliament of Provence,' had two sketches in



FIG. 4.—HEAD AT CHATSWORTH.

profile made of the head of the seated female statue, which Montfaucon published at the same time.

In Montfaucon's drawing of the male statue, the front part of both feet is still missing, and the plinth has its original irregular scanty form. The

statues had completely disappeared. Montfaucon remarked at the time when they were still in Apt, '*les statues doivent être apportées à Paris, et apparemment aussi l'inscription.*' I

am not acquainted with any later mention of them. After nearly two hundred years of concealment they are again restored to the view of scholars in our illustrations.

present regular plinth, together with the front part of the feet, is a restoration. The right arm must have been broken off and discovered near the statue; the drawing shows it lying loose beside the statue; four of its fingers are missing. These fingers were restored later, and the arm put in its place, for which a new shoulder-piece had to be made. As regards the head no information is given in the account of the find: the drawing shows it united with the body exactly as it is at present. But the head with the neck was executed separately, and let into the torso, as even our photograph clearly shows. The head is manifestly not the original one belonging to the figure. In the presence of the statue itself I naturally assumed that the head was not attached before modern times; but as the statue in Montfaucon's drawing is manifestly delineated as it was found, and no statement is made in the accompanying account of the find that the head was found separately, I am compelled to assume that the addition is an ancient one. It was a frequent practice in antiquity, as ancient testimony abundantly proves, to take the original heads from portrait statues, and substitute others in their place.

The type of the body of the statue is one which was very frequently employed in the early empire for portraits of the imperial family. The figure stands on the left foot; the right is drawn back ready to take the next step. The upper part of the body is undraped, and shows that ideal representation of the figure which is usual in naked imperial statues, and owes its origin to the study of the figures of athletes of classical times. The cloak covers the greater part of the legs; it is of circular form, and its folds extend in sweeping lines from the lower part of the right leg to the left hip. In the ordinary type of these imperial statues the cloak leaves the upper part of the body quite free, and both ends lie over the extended left fore-arm. The type appears thus in numerous examples.¹ The variant seen here is rare, where the cloak has one end disposed over the left shoulder and is drawn over the back.²

The head affixed to our statue is very remarkable. It is not a Roman type. This was already remarked by Montfaucon's correspondents, some of whom wished on that account to recognise in it an Apollo. Montfaucon, on the contrary, remarked: 'cet homme, qui n'a pas les cheveux à la Romaine, est apparemment un Gaulois.' The man's hair is indeed entirely un-Roman. It is much more the hair of the Greek type of Alexander. Above the middle of the forehead, of which the shape also recalls the portraits of Alexander, we indeed see just those two characteristic upstanding locks of which we have treated above in connection with No. 3. The other features however, and the expression of the face, which is quite lacking in pathos, being rather calm and matter-of-fact, are more Roman in character, and may in some ways be compared with the portraits of Tiberius. The nose (of

¹ Cf. Sal. Reinach, *Répert. de la Statuaire*, i. p. 163, 5; 184, 7; 401, 1; 507, 2; 561, 5; 563, 1; 564, 3; 582, 4; 586, 4. ii. 572, 6, 7; 573, 1, 5, 8; 574, 3, 4; 612, 1, 6.

² Cf. Reinach, *Répert.*, i. p. 152, 3.

which only the tip is restored) is sharp and hooked in form. The upper lip is extraordinarily short, the chin is small and retreating.

This singular medley of heterogeneous elements may perhaps be explained by the supposition that the head was executed in the south of France, and represents a local design of early imperial times. The Greek city of Massilia exercised a decisive influence over that neighbourhood. Even down to the time of the Roman literature which emanates from that province, the influence of the fundamental Hellenic conceptions is perceptible.¹ Pompeius Trogus, a native of Gallia Narbonensis, and the first Latin author to write a universal history, treated things Roman entirely from the Greek standpoint, and put Alexander and his kingdom at the beginning of his universal history. In the same way the artists of that neighbourhood may, when making the portrait of a nobleman of the country, have preferred to go back to the Alexander type.

Montfaucon expressed great regret in his publication that no inscription was found with his statue. Nevertheless, in an addendum (p. 14) he is able to communicate the pleasant tidings that M. de Mazanges has brought him the copy of an inscription 'qui a été trouvée auprès de ces statues, mais non pas tout-à-fait au même endroit.' But in this Montfaucon was deceived. As he so keenly regretted the lack of an inscription, he was given the copy of one which had been found at Apt a long time before, accompanied by the false assertion that it had been found near the statues; it seemed to be admirably adapted for the purpose, for in it mention was made of the erection of two portrait-statues. It must have been discovered in the period between 1636 and 1663, or at the latest before 1677; for in the collection of Inscriptions preserved in the Bibliotheca Vaticana, *cod. lat.* 9141, and made by Suarez of Avignon, who died in 1677, there is a copy in fol. 29 in his hand-writing, while at the side of fol. 16 a memorandum is pasted, which contains the original copy made by one of Suarez' correspondents. This only states that the inscription was at *Apta in uedibus D. Albertassi*. No statement of any kind is made about statues being found with it, or anything else respecting the find.² The dates of discovery which are mentioned in connection with other inscriptions of the collection, belong to the years 1636-1663. Fr. de Remerville, a native of Apt, who brought out a book on the history of Apt which appeared in 1692, also introduced the inscription, and in all probability he followed Suarez, for he says, 'on la voyait autrefois dans la maison d'habitation de la famille des Albertas,' a statement which is obviously borrowed from Suarez, and shows that even then he could no longer see the inscriptions for himself. Probably it was from this book that Montfaucon's correspondent took it, when he falsely made out that it was found with the statues. The inscription, which is now manifestly of no account, so far as our statues are concerned, runs thus (*C.I.L.* 12, 1115):

¹ Cf. Mommsen, *rom. Geschichte*, v. 100 f.

² Dr. Ziebarth had the kindness to collate the MS. for me and to ascertain the above facts. On the authority of Suarez this

inscription has been admitted to the *C.I.L.* 12, 1115; in the same place may be found personal details about Suarez and Remerville.

L · Allio · Severo · C · Al
 lius Celer | patruo
 testam · pon · jussit ·
 item · statuas · duas ·
 patr/// / / quar
 statuar · dedic · hered
 ex form · testament
 decur · sing · · XLXX /
 deder ·

We can gather nothing further from the inscription than the evidence that the inhabitants of Apt in the time of the early empire, to which this belongs, privately erected portrait-statues, which according to all appearance were set up in cemeteries. Such must also have been these two statues, with which we are now engaged.

The workmanship of the male figure points to the earlier years of the Empire, and indeed the head and body, even if they did not originally belong to one another, the head being only a subsequent addition, do not seem to be separated by any great period of time.

(9) **Statue of a Woman seated beside her Daughter** (Pl. XV.), of white marble, somewhat over life-size, preserved quite intact; only the projecting right foot of the woman is restored. Found together with no. 8 at Apt (cf. no. 8).

A woman in chiton and mantle, which covers the whole body and both arms, is seated on a chair with turned legs. In accordance with the well-known favourite motive in standing female portrait-figures, her draped left arm is bent across her breast, and the hand grasps the edge of the mantle. The right elbow is supported on the left hand. The same motive is found on the late Greek grave-relief no. 15, and doubtless the artist borrowed it from Greek sepulchral monuments. The feet rest on a low foot-stool which stands at an angle on the plinth. A young girl, doubtless her daughter, stands beside her; she wears a girdled chiton, with over-fold fastened on the shoulder; beneath this is an under-garment which covers the upper arm. The girl is leaning against her mother's chair; her legs are crossed, and she lays her left hand tenderly on that of her mother. The right hand is wanting.

The arrangement of the woman's hair shows the high mass of artificial curls which we find on the coins portraying Julia Titi and Domitia, the wife of Domitian. This determines the date of the statue; even if we consider it a production of the Province, we cannot carry it down further than the time of Trajan. The disposition of the daughter's hair is not one which suggests any narrow limits of time; this undulating arrangement was already characteristic of young girls in classical Greek times. It was again much worn by aristocratic Roman ladies, especially from the time of Faustina the younger. Here it is manifestly meant to characterise the young girl; the date is given by the arrangement of the mother's hair.

The statue of the mother is evidently a portrait; the daughter resembles



FIG. 5.—BUST OF FIRST HALF OF THE THIRD CENTURY.

her mother. The composition of the group is a purely external one, and not particularly clever. There is an analogous group in the Capitoline Museum

(Gallery 56) of a seated woman, beside whom stands a small boy in a toga with the bulla, and lays his right hand on her left leg. However, seated portrait-statues of Roman women are of the greatest rarity; only the well-known beautiful Greek type, which is best represented by the Torlonia



FIG. 6.—FAUSTINA THE ELDER.

example (*Monum. d. Inst.* xi. 11), appears to have been somewhat frequently employed for Roman women as well as Greek; but otherwise sitting portrait-figures of women were not customary among the Romans. It was different among the Greeks, where the women in sepulchral art were at all periods frequently represented in a sitting posture. Perhaps here, too, the Greek

influence which prevailed in Southern Gaul was a determining factor for the artist of our group.

The workmanship is careful, but entirely lacking in finer feeling. It exhibits the manner of the Flavian period. The male statue, no. 8, is of decidedly better and earlier workmanship.

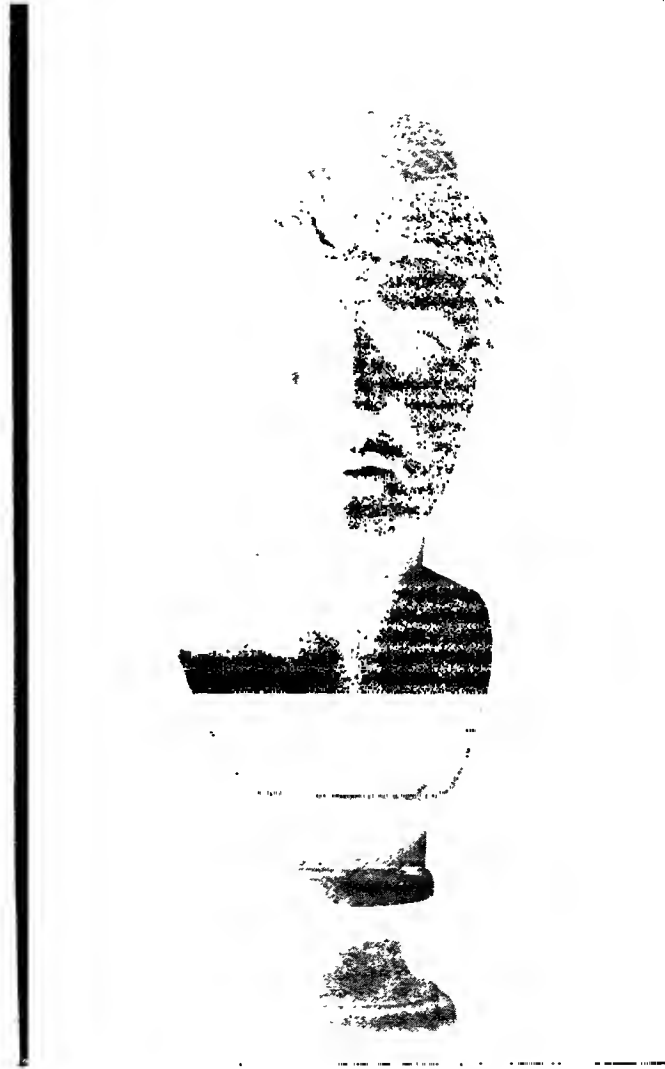


FIG. 7.—FAUSTINA THE ELDER.

Owing to the great rarity of the representation, the extraordinarily good state of preservation, and the comparative independence of the composition, the group deserves a prominent place among the received works of Roman portraiture.

(10) **Bust of a Woman of the time of Trajan** (Pl. XVI.) (white marble). With the exception of the support, which is modern, the bust has been preserved quite intact. The arrangement of the hair is similar to that of Marciana and Matidia. The head is an excellent life-like portrait in the simple unadorned style of the period of Trajan. Allied to it is the so-called Matidia in Naples (Bernoulli, *röm.-Ikon* ii. 2, Pl. 35), but this already shows the eyebrows and pupils in relief.

(11) **Female bust** (Fig. 5) **of the first half of the third century** (white marble). This bust, too, has been preserved quite intact. It is draped with chiton and mantle. The disposition of the hair is similar to that shown in Bernoulli, *röm. Ikon*, ii. 3, Pl. 18, the so-called Julia Donna, or the so-called Orbiana (*ibid.* Pl. 31) or the so-called Julia Mamaca (*ibid.* Pl. 32). Our bust is an extremely good work of its time and is moreover distinguished by its excellent preservation.

(12) **Head of Faustina the Elder** (Fig. 6) the wife of Antoninus Pius, placed on a modern bust; the front part of the nose is restored; a mediocre example of this common portrait.

(13) **Head of the same** (Fig. 7). The whole of the lower part of the face, the neck and bust are modern; the nose, too, is new. A poor example.

(14) **Bust of a man of the third century** (Pl. XVII.). The bust is entirely ancient, and is quite unrestored, except the ends of the roll in the left hand. The form of the bust is interesting; it belongs to the rare class peculiar to the third century, in which the half-figure is represented together with the arms.¹ The hollowing out of the back shows that it is a bust and not the fragment of a statue. The right fore-arm, however, is wanting in our bust, since the artist conceived it as hanging down. The portrait is of excellent workmanship. The short curly hair is worked after the fashion of the late Antonines. The beard is cut short, as was the general fashion in the third century. The troubled and anxious expression on the face is also a characteristic of that period.

B.—RELIEFS.

(15) **Grave-relief of the first century B.C.** (Fig. 8). According to the title beneath, it was acquired in 1832 as coming from Pella. A woman, veiled, is seated to the left on a chair with cushions. She is the dead Herennia Syriska. To her, as the embodiment of her soul after death, belongs the serpent coiled round the tree which stands behind her. Before her stands her servant who holds a small casket, and appears to be placing a little lamb on her mistress's lap. On the right is a male figure, very much damaged and somewhat smaller. This is Marcus Herennius, the son of the

¹ Compare, e.g., the Gordian III. in the Louvre. Bernoulli, n. 3, Pl. 38.

woman; he is wrapped in his cloak; in front of him stands his slave-boy in the customary attitude of grief. The serpent on the tree to the right and the horse looking over the wall belong to Herennius. The horse, as usual,



FIG. 8.—GRAVE-RELIEF OF HERENNIA SYRKISKA AND HER SON.

symbolises his state as hero. The workmanship is inferior and hasty. Below is the inscription, which is now broken away on the right.

Ἡρηννία · Συρρίσκα καὶ - -
 Μαρκε · Ἡρηννιέ Ἀγαθ - -
 καὶ σὺ · πολλὰ · τισπο - -

The right edge of the inscription must have been broken away subsequently to the finding of the stone. For doubtless this stele is identical with that seen by Villosion at Salonika in the house of a doctor Anastasios, the inscription of which he copied as follows (Böckh, *C.I.G.* 1982):

Ἑρεννία Συρίσκα καὶ υἱὸς αὐτῆς
Μάρκε Ἑρέννιε Ἀγαθοκλῇ χαίρετε.
καὶ σὺ πολλά, τίς ποτ' εἶ.



FIG. 9.—HEAD OF JUNO SOSPIA.

Villosion does not give the place where it was found; that this was at Pella was apparently not alleged until later, when it came to be sold.

(16) **Fragment of a relief** (Fig. 9) in white marble, with a head of *Juno Sospita*. This small fragment, which is of fine workmanship, seems to belong to Augustan times. It is incomplete on both the right and left sides. Probably the heads of other gods followed. The only one preserved is the head of Juno Sospita covered with the goat-skin, one of the rare representations of this goddess. The head is treated in a somewhat classicising style.

(17) **Small fragment of a relief** (Fig. 10) in white marble, with the



FIG. 10.—PART OF CHARIOT-GROUP.

front part of a **four-horse chariot** conducted by two male figures, full of life, a work of about the first century B.C.

München.

A. FURTWÄGLER.

GLEANINGS FROM MYSIA.

THE following notes were collected on a journey from Kutaya to Alexandria Troas in September 1899. My main objects were roads and sites, but I copied any inscriptions that came in my way, and believe that those here given have not yet been published.

1. AEZANITIS.—At Gyunuk Euren, three hours east of Chavdyr Hissar on the road to Kutaya, I noticed two tombstones of the door type which is characteristic of the country east of the Rhyndacus, and a pillar very like a milestone. One of the tombstones, which has a double gable, bears a half effaced inscription:

<i>Left Arch.</i>	“ ΕΚΛΑΑΝΔΡΙΜΝΗΜΗΧΑΡΙΝ
<i>Right Arch.</i>	· ΑΚΑΙΕΤΙΓΟΝΟΕΤΙΓΟΝΟΥΑ

The villages round Chavdyr Hissar are full of stones plundered no doubt from Aezani. In the cemetery at Eurenjik, five miles north-west of Chavdyr Hissar, I copied the inscription published (after Le Bas) in *C.I.G.* iii. p. 1080, No. 3846, z, 83. Le Bas read the opening words as *Μένανδρος ΚΟCΙΤΩ πατρι*. My copy has ΚΟΕΙΓΩ. There can be little doubt that the engraver omitted a Ν, and we must restore *Koel[ν]τφ*, = *Quinto*, a form common in the neighbourhood.

The following epitaph is inscribed on a square marble stele, which lies in a ditch by the road to Chavdyr Hissar, one mile from Eurenjik.

ΤΑΥΤΩΝΚΑΤΙΟ
ΦΟΡΩCΥΝΤΕCΦΙ
ΜΝΗΜΗCΧΑΡΙΝ

2. ABRETTENE.—When Messrs. Anderson, Anthony, and I visited this district in 1894 we discovered that Kiepert's map was seriously incorrect. The main errors seemed to be that the Egrignz Daglı and surrounding country were placed much too far south, and the town of Harmanjik much too far north (see Mr. Anthony's remarks in the *Geographical Journal*, vol. ix. 1897, pp. 266–7, 270–1. and Mr. Darbishire's note, p. 168). In 1899 I was able to get fresh compass-bearings from both sides, which entirely confirm the position which we assigned to the Egrignz Daglı, and show that the

Gyuje Dagħ (which Kiepert put close above the lake of Simav) must follow it northwards. As to Harmanjik I learnt by particular inquiries at Emed that it was only eight hours distant, and that the road to it lay through Sulya but not through Tavshanli. On the other hand there appears to be no direct road in use from Tavshanli through Sulya to Balat (*ibid.* p. 256). Travellers from Tavshanli to Balat pass through Harmanjik.

The following inscriptions are from the *village* of Tash Keui, which stands high above the *πέμνος* (v. *J.H.S.* xvii. p. 289).

(1) Gabled limestone *stèle* with pilasters at the sides. In the gable is a flower, and below the inscription a wreath. Letters $1\frac{1}{2}$ inch.

ΙΟΝΑΙΑΕΤΙΚΤΗΤΟΙ
ΤΟΕΥΝΤΡΟΦΟΜΝΕΙΑΣ
ΧΑΡΙΝ

(2) Fragment of a similar *stèle* built into the wall of a house. Broken below and to left, and much defaced. There may have been another line above. Letters $1\frac{1}{4}$ inch.

ΕΠΕΡΕΙ ἱερεῖ
ΥΝΗ γ]υνή.

(3) Small marble fragment, $8\frac{1}{2} \times 7\frac{1}{2}$ inches, built into the wall of a house. Broken except to right. Letters 1 inch.

ΣΤΕΦΑΝΗ
ΔΕΚΕΙΤΑΙ
ΑΦΕΤΗΣΔΟ
ΑΜΕΝΟΣ
ΥΣΑΝΤΑ

.... ος σ[τ]εφανη[φόρος ἐνθά]δε κείται
... ἀρετῆς δό[ξαν ἄειρ]άμνος.

(4) Coarse marble block built into the foundations of a grain store. Cut away at both sides. Letters $1\frac{1}{2}$ inch.

ΠΡΟΔΩΡΟ
ΥΕΑΥΤΗΚΑ
ΤΟΥΑΝΔΡΙΣ
ΙΟΓΕΝΗ
ΠΟΙΗΣΕΝ
ΝΗΜΗΛΧΑΡ
ΙΝ

Μ]ητροδώρο-
υ ἑαυτῇ κα-
ι τῷ ἀνδρὶ Δ[η-
μογένη ἐ-
ποίησεν μ-
νήμης χάρι-
τιν.

(5) Coarse red stone, 19×12 inches, built into the wall of a house. Broken to left. Letters $1\frac{1}{2}$ inch.

{ <div style="display: inline-block; vertical-align: middle; text-align: left;"> ΚΕΒΟΗΘΙΡ ΑΛΕΞΑΝΔΟ ΥΔΙΑΚΟΝΟΥΕ ΓΟΛΑΒΟΥ </div>	+] Κ(ύρι)ε βοήθι 'Αλεξάνδρο- υ διακόνου ἐ- ρ]γολάβου.
---	--

Apparently the cutter, having omitted the ρ in 'Αλεξάνδρου, inserted it in the line above at the end of βοήθι. The genitive or dative is used quite indifferently after βοηθεῖν in late inscriptions, *c.g.* *J.H.S.* xix. p. 69.

There is also a square limestone base standing in the middle of the village, but its inscription has perished, all but a few letters at the ends of the lines.

A second inspection of the curious pinnacle of rock known as Dikeli Tash revealed no more evidence of ancient workmanship than our first (*Geographical Journal*, ix. p. 273).

At Tafak or Tofak, a log village one hour from Dikeli Tash and three from Balat, stands a square marble *stèle*, 3½ ft. high × 1½ square, bearing the following inscription engraved in letters of good style 1 inch high. The right edge of the block is a little chipped.

ΧΑΙΡΟΙΤΕ ΟΙ ΠΑΡΙΟΝΤΕ
 ΤΟ ΔΕ ΟΛΟΝ ΗΝ ΠΟ
 ΜΟΙΡΑ
 ΕΠΙΘΥΜΗΤΟΣ ΘΑΙΔΙ
 ΓΛΥΚΥΤΑΤΗΣ ΨΝΒΙΩ
 ΜΝΗΜΗΣ ΧΑΡΙΝ

Χαίριτε οἱ παριόντε[ς·
 τόδε ὅλον ἦν πο[υ
 μοῖρα.
 Ἐπιθυμητὸς θαίδι
 γλυκυτάτῃ συνβίω
 μνήμης χάριν.

3. HADRIANEIA.—In publishing an inscription of Balat (*J.H.S.* xvii. p. 290) which records an honorary decree by the senate and people of the Hadrianeans, I suggested that it might be referred not to Hadriani but to a city Hadrianea, if a distinct city of that name could be proved to have existed. Mr. G. F. Hill has since then furnished the desired proof from the evidence of coins (*Journal International d'Archéologie Numismatique*, tome i. pp. 241-252). I also suggested that Hadrianea would have to be placed at Balat. I am now able to confirm that suggestion by the following inscription on a limestone block built into the wall of a house not far from the *konaak*. The stone, which is broken below and to right, is 2 ft. 3 in. long by 1 ft. 1 in. high. Letters 1¼ inch, worn and faint, but certain.

{ <div style="display: inline-block; vertical-align: middle; text-align: left;"> .ΙΒΟΥΛΗΚΑΙ ΟΔΗΜΟΙ ΑΔΡΙΑΝΕΩΝ </div>	'ΙΙ] βουλὴ καὶ ὁ δῆμο[ς 'Αδριανέων
--	---

The identification of Balat, which has been much disputed, is thus satisfactorily settled.

In a garden about two miles east of the town lies a coarse marble base

with the following inscription. The block is 3 ft. 9 in. high, 1 ft. 4 in. broad, 1 ft. 1 in. thick. It is broken away on the right. Letters $1\frac{1}{4}$ inch.

ΑΛΑΡΡΙΑΝ	Αἰλ. Ἀρριαν[ός
ΣΥΜΦΕΙ	Συμφε[ρούση
ΘΡΕΠΤΗ	θρέπτη [καὶ Κο-
ΜΑΝΩΣΥ	μανῶ συ[ντρό-
ΦΩΖΩΝΤ	φω ζώντ[ι μνή-
ΜΗΣΧ	μης χ[άριν.

In view of the intimate relations between the historian Flavius Arrianus and Hadrian, and the close connections of both with this part of Mysia, Hadrian's favourite hunting-park and the home of the brigand chieftain Tilliboras, the name Aelius Arrianus is interesting and suggestive.

4. HADRIANUTHERAE.—As I emerged one evening from the mountains and forests that stretch westwards from Balat, and rode in the twilight towards Kepsud, I was at once struck by the aspect of a low hill not far from the road. It looked the very type of a Greek site. The *zaptich* who was my guide, a Circassian of the neighbourhood, had stories to tell about it, which still further roused my curiosity—how there had been a *kule* there in olden days and a great treasure of gold was buried on the hilltop, and how a *pasha* from Stambul had tried to dig it up, and found nothing but stones. Next morning I returned to Bey keni, a village facing the hill and one hour's march to the south-east of Kepsud. There I found 'ancient stones,' and among them an inscribed marble block built into a fountain—

ΠΑΤΡΙΣΤΕΦΑΩ	Πατρὶ Στεφά-
ΝΩΙΕΤΙΚΤΗΤΟΣ	νωι Ἐπίκτητος
ΚΑΙΩΤΗΡΙΧΟΣ	καὶ Σωτήριχος
Ο ΑΔΕΛΦΟΙ	οἱ ἀδελφοί.

The shallow dip between Bey keni and the hill is littered with the debris of an ancient town, stones, potsherds, and what not? The hill itself, especially its eastern slope, has apparently for centuries been used as a cemetery, and almost all the tombstones are fragments of ancient monuments—columns, bases, architectural blocks, and the lower half of a draped statue. Most of these stones are of a coarse marble which weathers to a deep grey colour. They are scattered over the slope among oaks and underwood, so that it is no easy matter to be sure that one has seen all. There must be more underground, for the hill is said to be a favourite quarry for wrought stones. Especially common are square bases with mouldings above and below and panels on the sides. They must have had some architectural purpose, for they are not inscribed. One or two, however, do bear inscriptions in a rude late style, and it is possible that more might be found if all the blocks were turned over. I copied these two—(the second is broken above)—

(1)	ΑΛΕΞΑΝ	Ἀλέξαν-
	ΔΡΟΣΦΙΛΟ	δρος Φιλο-
	ΝΕΙΚΗΓΛΥ	νείκη τῇ γλυ-
	ΚΥΤΡΗΣΥΝ	κυτάτῃ συν-
	ΒΙΩΜΗΣ	βίω μνή[μη]ς
	ΧΑΡΙΝ	χάριν.
	ΕΤΤΡΓ	ἔτ(ους) τηγ. (=393)
(2)	ΜΕΝΟΣΕ	-μενος ἐ[κ τῶ-
	ΝΙΔΙΩΝΕ	ν ἰδίωv ἐ[αυ-
	ΤΩΚΑΙΓΥ	τῶ καὶ γυ[ν-
	ΑΙΚΙΚΑΙΤΕΚΝ	αὶκὶ καὶ τέκν[φ καὶ
	ΓΕΚΝΟΡΝΑ	τ]έκνο[ν] γυναι[κὶ
	ΖΑΙΕΘΝΟΙΣ	καὶ ἐ[κ] γόνοις.

In line 4 of (1) the eccentric position of the Α is to be explained by the impatience of the engraver who wrote the syllable *τη* before he had written the syllable *τα*, and then corrected his mistake with the least possible trouble to himself. Similarly in line 6 he cut the vertical stroke of the *ρ* before he had written the Α. The engraver of (2) was less careful to correct his errors, but even the conscientious (1) has *μνης* for *μνήμης*.¹

We have here to do with a considerable Greek city which had a history of at least four centuries behind it. What was it? The obvious answer is Hadrianutherae. Kepsud has been generally supposed to represent Hadrianutherae on the strength of the inscriptions there, but it is now clear that they were brought from Bey keui. I always felt that the remains at Kepsud were inadequate for the ancient city, and expected to find it farther west. But repeated inquiries failed to produce a better alternative, and Chair Hissar, which I suspected from its name, has scarcely a trace of antiquity. The discovery of an ancient site at Bey keui far more important than any other known in the plain of Balukiser seems decisive. Its position close under the eastern hills suits Hadrian's hunting (although that may not be the ultimate derivation of the name); it is within easy reach of Bigaditch, as it should be if Bigaditch is Achyraous; and it lies on one great road to the Caicus valley. My interpretation of Aristides (*Geogr. Journ.* ix. pp. 165-6) will require some slight revision.

On the right bank of the Kepsud river, opposite to the new village of Karachalda or Karacharda one hour above Kepsud, an ancient edifice has recently been uncovered and exploited for building-stone. Among the wreckage are large fragments of a brightly coloured mosaic pavement, and in a yard at Karachalda I was shown a piece of inscribed marble block, broken above and to left. Letters $\frac{3}{4}$ inch.

{ HETHENATPIMNH } χη[ς] τῇ ἐνατρὶ μνήμη[ς]
 ΧΑΡΙΝ ☿ χάριν.

¹ Possibly *μνης* was a recognized abbreviation. Cf. *J.H.S.* xvii. p. 280, no. 35.

The plural *εἰνάτερες* is used in Homer, and the singular *enater* occurs in a Roman inscription (Orelli 4943) apparently as a masculine. I can find no other instances.

The following inscription, on a square *stèle* of coarse marble in the cemetery half a mile south-east of Kepsud, may be already published, but I do not know where. It is badly weathered, and illegible below.

ΑΥΡΝΕΙΚΙΑΣ	Αὐρ. Νεικίας
ΥΙΑΥΡΕΥΚΛΕ	κα]ὶ Αὐρ. Εὐκλεία
ΩΝΕΕΑΥΤΟ	ζ]ῶν[τ]ες ἑαυτο[ῖς
ΑΙΤΕΚΝΟΕΚΛ	κ]αὶ τέκνοις κα[ὶ ἀδελ-
ΟΙΣΚΑΙΓ	φ]οῖς καὶ
ΟΥΕΟΙ	οὓς οἱ
ΕΙΓ	
Τ	

A rude inscription on a marble block in a wall at Balukiser may find a place here—

ΚΕΒΩΗ	Κ(ύρι)ε βωήθι
ΤΟΝΔΣΛΟΝ	τὸν δοῦλον
ΣΤΕΡΟ	σοῦ Πέτρο[ν].

5. ON THE TARSIVS AND THE AESEPUS.—I had a notion (cf. *Geogr. Journ.* ix. pp. 167–8, 276), based partly on a misinterpretation of Dorigny, that Poemanenum might be found at Gumenij, ten miles south of Balia Maden, and accordingly shaped my course that way from Balukiser. From Argimia we bore away to the right of the Ivrindi *choussée* between the hills and a marsh to a spring, about which are numerous sherds of ancient pottery and faint traces of a settlement. Thence we struck up to the left into the hills, and in half an hour reached Gumenij. Just below the village is a cemetery which contains a few ancient columns and blocks. The castle lies half a mile beyond and below the village. It is a small Byzantine fort perched on an isolated pinnacle of rock at the junction of two narrow valleys. On the north side flows the river, a branch of the Tarsius, east and west are precipitous ravines, and south is a little pocket of flat grass-land narrowing up the defile. To the east is a steep rocky hill on which are remnants of walls, and a carved stone is said to have been found there, but I could hear of no inscriptions. There was certainly an ancient town here, and the situation is no doubt a very strong one, but it is too remote and inaccessible for Poemanenum. I cannot suggest any identification.

A difficult path leads from Balia Maden by Doghanlar to Balia Bazar keni. Probably no wheeled traffic has ever traversed these stony uplands. On the other hand the road between the lower Aesepus and the gulf of Adramyttium is in constant use, and the guest-chamber at Bazar keni is

often crowded. These facts are all in favour of placing Poemanenum and Artemea in the neighbourhood of Gunen. Nevertheless I was anxious to visit Khydyrlar, $4\frac{1}{2}$ hours from Bazar keui up the valley of the Aesepus, where there are hot springs which might put in a rival claim to be those of Artemis Thermaea, and antiquities of which I had heard grossly exaggerated reports. So I journeyed westwards into Avunia (*Ἀβλωνία* ?), that deep sequestered *corry* at the back of Mount Ida.

There are two hot mineral springs at Khydyrlar. One is up the hillside just above the village. It is of a comfortable warmth, but utterly neglected. A little ruined bath-house of no great age is the oldest object about it. The other spring is much hotter—one cannot hold a hand in it at the source. It lies in a beech wood, half an hour farther west along the hill. Here there is a bath still in use but very mean, and round about it some scanty remnants of antiquity—rude pilasters, marble slabs, and an altar decorated with garlands and bulls' heads, but no inscriptions. At the farmstead in the plain below are a couple of small marble columns.

I met with only one inscription in Avunia, a Latin epitaph engraved on a gabled limestone *stèle* built into the basement of the mosque at Ingeji. Letters 2½ inches.

MAN/VCI/VSE

BVCCONISE



M. [Min]ueius.

• • • • •

.....h(ic) s(itns) e(st).

From the end of the plain of Avunia wood-cutters' tracks lead through the forests of Ida over the pass between the head waters of the Aesepeus and Scamander. Much timber is felled for export down the rivers to the sea, and finds its way even as far as Alexandria. The head stream of the Aesepeus, choked with pine splinters, takes a dark tinge from the chips of bark, so that 'the black water of Aesepeus' is a literal fact, although one would not care to drink it.

6. SCEPSIS.—At the village of Kurshnulu I copied the following fragmentary inscription. It is engraved on a bit of marble slab which measures $14\frac{1}{2} \times 10 \times 2\frac{1}{2}$ inches. Letters $\frac{3}{8}$ inch. The writing, although not very careful, is of good early style, fourth or third century B.C. The fragment is broken on all sides except perhaps the right, but the inscription is complete below and I think nearly complete on the right.

ΔΕΚΑΤΗ

ΤΡΙΣΙΝΕΑΝΔΕΜΗΚΑΤΑΣΤΗΣΗ

ΑΣΚΑΤΑΒΟΛΑΣΕΝ ΤΟΙΣ ΧΡΟΝΟΙΣ

ΟΙΣ ΑΝΑΓΝΩΛΗΣΕΙΟΤΑΜΙΑΣ ΚΑΙ

ΘΟΤΙΚΑΙΤΟΥΣΤΑΣΔΗΜΟΣ

ΗΕΓΓΥΛΜΕΝΟΥΣΠΡΑΣΣΕΙ

Η ΝΟΣ ΑΡΓΥΡΙΟΥ ΣΤΑΤΗ

δεκάτα[ι
 ἐν ἡμέραις] τρισίν· ἐὰν δὲ μὴ καταστήσῃ
 τ]ὰς καταβολὰς ἐν τοῖς χρόνοις
 ἀναπωλήσει ὁ ταμίης καὶ
 κα]θότι καὶ τοὺς τὰς δημοσ[ί]-
 -ας ὠνὰς πριαμένους] ἢ ἐγγνωμένους πρᾶσσε[τω
 εἰς τὸ ἱερὸν τοῦ Ἀπόλλ]ωνος ἀργυρίου στατῆ[ρας
 ἑκατόν?]

Evidently we have here the end of a decree. This final clause is meant to provide for the punctual payment of certain instalments of money, and empowers the treasurer to sell up defaulters. In the first line we ought perhaps to read *δεκάτη*, and interpret it as part of the date at which payment fell due.

The following inscription is doubtless from Kurshunlu Tepe. It is on a square marble base which stands at the south end of the new bridge at Bairamitch. Both sides are a good deal clipped.

ΕΡΩΥΣΙΑ	Ἡ γ]ερουσία
ΗΕΡΕΑΤΟΥΔΙ	τὸν] ἱερέα τοῦ Δι-
ΣΥΙΔΑΙΟΥΚΑΙ	ὸς τ]οῦ Ἰδαίου καὶ
ΝΣΕΒΑΣΤΩΝΙ	τῶ]ν Σεβαστῶν Γ[ν-
ΟΝΦΑΒΙΟΝΟΥ	αἰ]ον Φλάβιον Ὀλυ[μ-
ΟΔΩΡΟΥΙΟΝ	πι]οδώρου υἱὸν
ΥΜΠΙΟΔΩΡΟΝ	Ὀλ]υμπιόδωρον,
ΝΕΚΤΡΟΓΟΝΙ	τὸν] ἐκ προγόνω]ν
ΣΠΑΤΡΙΔΟΣΕΥ	τῆ]ς πατρίδος εὐ-
ΤΤΜΝΚΑΙΕΑΥ	εργέ]τ[η]ν καὶ ἐαυ-
ΥΤΤΟΣΙΑΡΧΗΝ	τῆς σ]υ[μ]ποσιάρχην.

Zeus Idacus appears on coins of Scepsis (Head, *Hist. Num.*, p. 474). The same title is used at Ilium and in Crete.

At Seraijik, a little north of Kurshunlu, there is a tombstone lately found at Scepsis. It is a tall plain marble slab, broken below, but the inscription is far above the break. Letters about 1 inch, of good early style.

ΑΡΙΞΤΑΡΧΟΣ
 ΛΕΟΝΤΟΣ

The site of Scepsis is being actively plundered for building materials and ought to be carefully watched. Many interesting inscriptions may come out of it in the near future, and may be irretrievably lost if not promptly recorded. The important letter of Antigonus (*J.H.S.* xix p. 330) was likely to be sold to a baker for a kneading-board when I intervened, and I cannot guarantee that it has not since then perished in his oven.

J. ARTHUR R. MUNRO.

NOTE.

The following corrections may be made in my 'Inscriptions from Mysia,' *J.H.S.* xvii, pp. 268-293 : -

Page 269, no. 5, for Καίλιος read Κ. Αἴλιος.

Page 272, at the top. I should now definitely place Miletropolis at Melde.

Page 285, no. 49, for ...σης Τίλλιος read Σεστύλλιος = Sextilius.

Page 292, no. 72, for 'Ορατίας, Εἰλων read 'Ορατία, Σείλων.

J. A. R. M.

ON OLD GREEK TACHYGRAPHY.

[PLATE XVIII.]¹

THE history of tachygraphic writing in classical and post-classical antiquity remains still, to a certain degree, involved in obscurity, so that many problems still present themselves for final solution. What is the significance of the fact that while we have complete and certain knowledge of the Roman system, the *notae Tironianae*, the very existence of a corresponding Greek system is with difficulty proved? Were there three distinct systems of Greek shorthand, or only one in successive phases? How were they related to the 'Tironian'? Are there any elements of method or of form which are common to all the 'systems' of antiquity known to us? In what degree was the Greek a genuine tachygraphy, *i.e.* a means of writing at a much greater speed than in the common hand? Or was it only a method of secret writing, or to economise space and labour? Was it phonetic, syllabic, alphabetic, *ad verbum*, or phraseographic? Was it purely arbitrary, or related to the ordinary forms of writing? If related, to which?—to the cursive, the capital, or the minuscule? Above all, what were the graphic elements, and the final forms of the developed systems?

The labours of Kopp, Blass, Gardthausen, Schmitz, Wattenbach, Lehmann, Ruess, Giry, Tardif, Chatelain, and others have, especially during the last twenty years, gone far towards the solution of many of these problems, while among those who have most recently contributed towards our acquaintance with old Greek tachygraphy, the names of Gomperz, Gitlbauer and Wessely stand pre-eminent (see Bibliography). Since 1884, when an inscription of the 4th century B.C. was found on the Acropolis, and shown by Gomperz to deal with a system of writing by geometric forms, the languid interest taken in this subject has been quickened, and kept alive by the results of searches made among the palaeographic treasures from the Fayum and Hermopolis Magna. At last in three successive years, 1893, 1894, 1895, W. Schmitz's magnificent edition of the *Commentarii notarum Tironianarum*, M. Gitlbauer's *Die drei Systeme der griechischen Tachygraphie*, and C. Wessely's *Ein System altgriechischer Tachygraphie* together embodied the latest results of research in the whole field of Roman and Greek tachygraphy.

The somewhat varied applications of which the term tachygraphy is

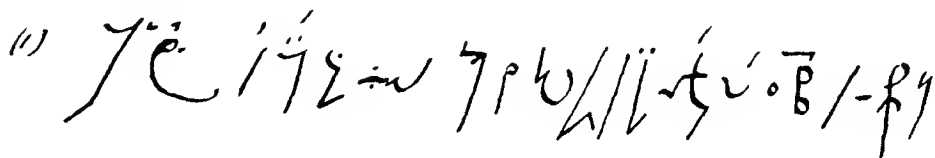
¹ Slightly reduced in scale.


capable make it desirable at the outset to fix upon a definition of it. In one aspect it is an *Engschrift*, a brachygraphy or stenography properly so called, and in one of its chief remains, the Codex Vat. Gr. 1809, the saving of space seems to me one of the chief advantages sought by its use. In another aspect it is a means merely or primarily of gaining speed, by the use of either purely sematographic forms, or of some method of systematically reducing the extent of outline required for the representation of the spoken sound, a true tachygraphy. In the curious postscript, written in detached syllables in the common hand, of the Cod. Paris. Græc. 1056 (sæc. X or XI) it is claimed, if Gittlbauer's interpretation (*Die drei Syst.* p. 25) is correct, that the text, that is, the tachygraphic original, was written down at the rate of 27,290 words an hour—three times as fast as a rapid speaker! For himself, the writer makes the boast, modestly veiled, of having written out a piece which occupied in reading 'five water-clocks,' no less than 900 times in a day (so Gittlbauer; or that, as I should prefer to read it,¹ he wrote a passage 900 times by the water-clock 5 times replenished. As he remarks, *θημίσεια αὐτὰ ἀπὶ θάνα* ' But whatever we may make of these impossible claims, they do imply that there existed, at least in the tenth century, a Greek tachygraphy which was regarded as a means of very rapid writing. As brevity is, within certain limits, in a direct ratio to speed, we may include brachygraphy and tachygraphy together under the name of the latter; but as compactness is not necessarily conducive to rapidity, and indeed when carried to an extreme, is a hindrance to it, we could hardly include under tachygraphy those forms of minute writing which are left on record (Plin. *Nat. Hist.* vi. 21; Plin. *Epist.* iii. 5, 17) were it not that they were possibly adaptations or borrowings from the current tachygraphic system of the time (Birt, *Ant. Buchwesen*, pp. 71, 86). In this general class must, I think, be included the Cod. Vat. Gr. 1809, for it is tachygraphic only to the extent of a substitution of the signs from a shorthand syllabary for the successive syllables, the words being in this way fully written. By this expedient, however, a considerable saving in manual labour and eventually of time must have been effected, and this, joined to the economising of space and the cryptographic appearance, would sufficiently account for this kind of quasi-tachygraphy. On the other hand, cryptographs, as such, are excluded; often they are more cumbrous than the ordinary writing, and even when developed, as in the magical papyri (cp. Brit. Mus. Pap. cxxi—cxxiv, cxlvii and cxlviii), the symbols are only accidentally shorter than the corresponding word. Nor is it convenient to include under tachygraphy writings in the current hand, having symbols instead of written word-endings, subscript and superscript letters, and other abbreviations, although they may be very 'tachygraphic' in character, and can often lay as good a claim to the name as the so-called tachygraphy of the 10th century (see Wattenbach, *Scripturæ græcæ specimen*, 1897, Tab. xiv, xvi, xxiii, xxiv, xxv, etc.) Tachygraphy, then, is for the purposes of research to be defined as

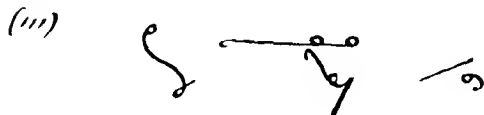
¹ The text is *ε γαρ ψε γαρ μα τα ες τα να γον στυ κον δυ α ε θυ μυ συ α τα α πε θα να* *θη* that is *ἔγραψε γράμματα ἐς τὰναγνώσκειν κύνδυα ε' (θημίσεια αὐτὰ ἀπὶ θάνα) ἐνακόσια*.

a general name for all kinds of short writing, which are found in extant MSS., when reduced to a system, employed for continuous passages, and with the purpose of increasing the speed and ease of writing, the standard of speed being the ordinary rate of speech.

The fact that, while German philosophical magazines have for the past twenty-five years contained numerous treatises and discussions on the subject of tachygraphy, hardly a single article of importance has yet appeared in England. (except T. W. Allen's *Fourteenth Century Tachygraphy*,¹ in Vol. xi. of the *Journal of Hellenic Studies*, with facsimiles), may be due to the somewhat unsatisfactory position, in relation to classical and archaeological studies, in which tachygraphy stands. It so happens that very little remains of this kind of writing, and that which we have is either fragmentary, or in other respects obviously unimportant; decipherment is exceptionally laborious and uncertain; and the *prima facie* evidence that in the Greek remains we really have a shorthand system of antiquity is somewhat incomplete. It would be hard to maintain to the satisfaction of scholars familiarly acquainted with the rapid flow of especially some forms of the Greek cursive, the claim of the deciphered portions of Greek 'tachygraphy' to be a means of writing much faster than in longhand. Compare, (i) Πέτρος ἔξυσεν, τάλας κληρικός, ἐν ἔτει, σποβ' ἐν Ἀφρικῇ, (Gitlb. *D. dr. Sys.* p. 21), written in the 'African' style, which represents the older phase of 10th century tachygraphy, in the year 964, as a subscription to Cod. Laur. ix. 15, in which the pen is lifted thirty-four times, with (ii) a sentence of the same length, *Postula a me et dabo possessionem tuam terminos terrae* (Ps. ii.) written in *notae* in a 'Tironian Psalter' (O. Lehmann, *Das Tiron. Psalt.*), in which it is lifted only nine times; and again with (iii) a similar sentence, *As far as the characteristics of the present age are concerned*, written in English shorthand, in which it is lifted five times only.

(i) 

(ii) 

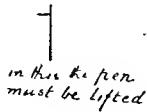












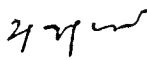
(iii) 

The tediousness of the 'African' is at once apparent; yet the English out-

¹ On the tachygraphic portions of the MS. Vat. Reg. 181.

lines are by no means unnecessarily condensed: written very rapidly they will just keep pace with the most rapid speech.

Or, again, compare the older tachygraphic signs of the Rainer-fragments with *contemporary or still older*¹ cursive (ligatured). In spite of the superiority of the signs generally, the cursive are often almost as brief, as for example the following:

FROM THE RAINER-PAPYRI. Tachygraphic Syllabary.		FROM NON-TACHYGRAPHIC MSS. Common Cursive, all older than the Signs.	
αι		 (Petric Pap. Pl. XIV.)	
		 (Ostraka, B. Mus. No. 14123 etc.)	
		 (Vol. of Exer. Pl. XLIII. 65 bis.)	
σι		 (Pal. Soc. ii. Pl. 143.)	
υρ		 (Ostr. No. 14118.)	
τυρ		 (Ibid.)	
ων		 (Petric Pap. Pl. XIV.)	
αρ-ουρ-ων		 (Pal. Soc. ii. Pl. 143.)	

Tediousness, however, might seem less a drawback if it secured accuracy; but when a *δυρ* a *υος* has to pass (Gith. *D. dr. Sys.* p. 24) for 'Αδριανός, *τυρ* a *κου* *συ* a for *τριακόσια*, *κλι* *ρι* *κος* *ἐν* *ε* *τι* and *α* *φρι* *κι* (in the above subscription) for *κληρικὸς ἐν* *ἔ* *τει* and 'Αφρικῆ, while having regard to the signs also one finds, in the same subscription

$\epsilon\nu = \text{L} = \text{L} = /$, $\alpha\nu (\text{L}) = \text{L} = \text{L}$ $\epsilon - \rho\omega = \rho\omega_1 = \rho\omega_2 - \text{X}$
 $\gamma = \lambda_1 = \beta_1$

all in a sentence of a dozen words, it is perhaps harder to put faith in the readings at first sight. Then when the latest documents produced (Wessely, *Ein System*, 1895, pp. 18-30) prove only the existence in the Byzantine and later Roman periods of a syllabic system similar to the later one just quoted,

¹ From mediæval Greek MSS. much briefer examples may be drawn, but in these it is hazardous to say that we are dealing with ensive developments, and not with borrowings from tachygraphy.

there may have seemed good reason for postponing for the present any conclusion concerning old Greek tachygraphy as a 'working' system.

Nevertheless, the recent contributions¹ of Dr. Gittlbauer and Dr. Wessely have brought the main facts quite out of the region of conjecture. We know—what seemed indeed *a priori* probable—that Greek tachygraphy is to be traced in various phases from the Ptolemaic period down to the 15th century. We know its alphabet, with many of its variant forms. We know that it was at all times developed at least as far as the syllabic stage, but we wait for further evidence of its having had a more perfected form. We have the later 'New' or Italian tachygraphy, probably at its best, though the analogy both of the 'Tironian' and the modern systems makes it extremely probable also that it is but the stunted descendant of a fuller, more rational, and more practical system, of which the fragments we possess from the earliest centuries of our era are the elementary portions only. Finally we have traces, and one notable monument, of the existence of a Greek system earlier than all, the so-called Xenophontean. The premises from which such conclusions may be drawn will be indicated in the following pages.

What remains of Greek tachygraphy do we possess? Though not numerous, they represent a very long period, from the 4th century B.C. to the 14th or 15th century A.D. The later specimens are all interesting to the student of old Greek tachygraphy, because they stand in significant relation to the older, and help to complete the still inconclusive argument that all ancient tachygraphy must be regarded as phases of the same, rather than as distinct and separate systems. They cluster into three groups. One of these consists of those tachygraphic passages and annotations which are to be found in MSS. of the 10th-14th centuries. This group falls into two² subsections, the one showing a closer approximation to the older tachygraphy than the other, which is styled the 'New' tachygraphy and originally emanated from the monastery of Grottaferrata, where certain of our existing specimens were written. A convenient distinction has been suggested in the names 'African' for the earlier and 'Italian' for the later or Grottaferrata style (Gittlb. *ibid.* p. 22). To the next group belong the papyri, wax-tablets, etc., which recent explorations have given us, and a waxen book which has been at the British Museum for many years, and long known to be of the 3rd-4th centuries which now for the first time, since the Fayum discoveries, can be tentatively classed as to its tachygraphic portions. The remaining group, though of extreme interest, is numerically hardly worthy of the name: its nucleus is that inscription of the marble slab which was found on the Acropolis in 1884, and which is undoubtedly of the 4th century B.C.

¹ *Ude 'Bibliography,' infra.*

² A third might be made of the 14th cent. tachygraphy which has some quite new develop-

ments (T. W. Allen, *Journ. Hell. Studies*, vol. xi.). But this is beyond the purview of the present subject.

Ptolemaic and Roman Periods.

- (i) A marble slab, much injured, with part of inscription, found on the Acropolis in 1884, 4th century B.C.
(Illus.: *Gitlb. D. dr. S.* Taf. i.)
- (ii) A tachygraphic subscription to a MS. at Leyden, 106–5 B.C.
(See C. Leeman, *Pap. Grace. Mus. Lug. Bat.* Tom. i. Pap. iv. Tab v. 2–6.)
- (iii) Four fragments at Leipzig, Nos. 19, 20, 21, 22, 2nd–3rd century.
(See Gardthausen in *Hermes*, Vol. xi. with facsimiles.)
- (iv) One line of tachygraphy in Brit. Mus. Pap. cxxi. (a magical pap.) 14, col. 27, 3rd century.
(See Kenyon *Cat. of Gr. Papyri in Brit. Mus.* Facsim. and notes.)
- (v) A waxenbook in the British Museum. Add. MSS. 33,270. Probably 3rd century.
(See pp. 252 *et seq. infra* and Plate XVIII.)

Byzantine Period.

- (vi) Three papyrus fragments in the collection of the Archduke Rainer 5th–6th century.
(See *Corpus Pap. Raineri*, Taf. xiii. and Wessely, *Ein Syst. altgr. Tach.* Tafs. i., iii.)
- (vii) Seven fragments of wax-tablets in the same collection; one certainly, and all probably, 5th (6th) century.
(See *Corp. Pap. Raineri*, and Wess. *ibid.* Tafs. ii., iv.)
- (viii) Various fragments, of the 4th–8th centuries, containing short passages in tachygraphy varying from 4 to 12 lines in length.
(See Wessely *Ein Syst. altg. T.* pp. 15–18: *Musées Nationaux* E 6846, 6896=164, 855 W, 760 W, 7155 C, verso App. 15, 7121 verso App. 702, 6550, 7072, 6846, 6=15 6875 App. 267.)
- (ix) Seven fragments of papyrus, at the Bodleian Library, Oxford: viz. MSS. Gr. class. a 6 (P); Gr. class. e 77 (P); Gr. class. f 36 (P).
(See p. 259 *infra*).

Tenth Century.

- (x) Subscription of amanuensis who wrote *Cod. Laur.* ix. 15; 964 A.D.
(See *Gitlb. D. dr. S.* p. 21 and Taf. iii. 24.)
- (xi) The *Codex Vaticanus Graecus* 1809, containing the “*Confessio S. Cypriani*,” etc.
(See *Gitlbauer, Die Uebersetz. gr. Tach. in Cod. Vat. Gr.* 1809, with transcription and plates. *Vide Bibliography.*)

- (xii) The London Nomus-Codex scholia and foot-note (British Mus. Add. MSS. 18231) A.D. 972.
(See Wattenbach, *Script. Gr. Specimina* Taf. xvii.; Pal. Soc. ii. 85).
- (xiii) The glosses of the Paris Hermogenes (Cod. Paris. 3032).
(See Gitlb. *Dir. dr. Sys.* p. 49; Montfaucon, *Pal. Crit.* p. 351; Kopp, *Pal. Crit.* Part i. p. 437).
- (xiv) Cod. Reg. 3514 (Montfaucon, plate p. 354).
- (xv) The MSS. (Biblioteca Angelica, Rome. B. 3. 11 and another) given in facsimile *Pal. Soc.* ii. 85. and 86 show many borrowings from a tachygraphic system, and some pure tachygraphy.

Later.

- (xvi) The Vat. Reg. 181. 14th century.
(See T. W. Allen, *Journ. Hell. St.* vol. xi. with plates.
- (xvii) Some 'Crypto-Tachygraphy' in a 15th century Lucian, Cod. Pal. 73, (Wessely, *Ein S.* p. 2) may perhaps be placed here.¹

To these may be added the subscription to the Cod. Paris. Gr. 1056, 10th (or 11th) century, which is not indeed in tachygraphic characters, but is most probably a transcript of a tachygraphic original (Gitlb. *D. dr. S.* p. 24). Among the most interesting of the MSS. containing abbreviations obviously related to a tachygraphic system, is the *Fragmentum math. Bobiense*, 7th century (see Wattenbach, *Specimina*, Taf. viii.); and others in the same collection (xiv. (Arist. Cod. Ambr. L. 93); xxiii.; xxiv.; and perhaps xxv.).

Long lists have from time to time been published of tachygraphic signs found in the MSS. (Montfaucon, *Pal. Græca*, 1708, p. 355; Ruess, *Ueber Griechische Tachygraphie*, 1882; Gardthausen, art. in *Hermes*, vol. xi, 1876; Gardthausen, *Griech. Pal.*, 1879, p. 212). The bulk of these signs make up the syllabary of the purely tachygraphic documents on vellum; a few are direct borrowings from them, found in ordinary minuscule documents. The latter, which alone can be considered as genuine tachygraphy in minuscule contexts (among them we may include deliberate imitations of such signs), have reference to medieval manuscripts only. It is important to observe the different nature of the symbols which occur in the papyri. The evidences for the existence of tachygraphic borrowing in the whole of the Ptolemaic and Roman, and nearly the whole of the Byzantine period, are extremely doubtful. I have examined with the utmost care the symbols of about three hundred papyri, and have made an exhaustive search of the principal published texts, including the British Museum, the Petrie, the Oxyrhynchus and the Fayum collections, yet have gathered only the small harvest of half a dozen

¹ The *Jahrbuch der deutsch. archæol. Instituts*, vol. xvi. Pt. I. (Anzeiger. p. 16), mentions the publication of eleven Greek tachygraphic signs (by Wessely), etc. in the *Archiv für Steno-*

graphic. But in consequence of a bookseller's mistake, I have not yet been able to see the original article.

symbols which appear independent of ordinary cursive or epigraphic methods of abbreviation.¹

The signs found on ostraka are often very interesting. Indeed one shard which I have copied, a terra-cotta fragment at the Ashmolean, Oxford, contains pure tachygraphy—in one sense, inasmuch as the common symbols for *ἄρουρα*, *ἀρτάβη*, *δραχμή*, are here unmingled with any letters in the ordinary hand.

Contemporary testimony to the existence of tachygraphy, in the general Greek literature of our earliest period is, with one doubtful exception, strangely lacking, and although retrospective allusions in one or two passages help to atone for this lack, the case for the oldest Greek tachygraphy may be said to rest upon the documentary evidence alone. In the Roman period, from the earliest in 164 A.D., allusions do occur (Zeibig, *Gesch. u. Lit. der Geschwindigkeitsschreibekunst*, p. 40) as also in early-Byzantine. The reader will find a discussion of the well-known passages (Diog. Laert. *Vit. Xen.* ii. 48 etc.) in Gitl. *D. dr. S.* pp. 16–18 (cap. v.) *et passim* (vide Bibliogr.); and Gomperz in *Wiener Studien* ii. 188 p. 3 Ann. i. for the *locus* of 164 A.D.

The first on our list above, the marble slab found on the Acropolis, and attributed by Köhler (*Mittheilungen des deut. archäol. Instit., Athen. Abth.* Bd. 8 (1883), p. 359 ff.) to the middle of the 4th century B.C. is that upon which chiefly rests the claim of tachygraphy to be old Greek at all. The year is therefore considered epochal² in the modern study of ancient tachygraphy, and the discovery has certainly brightened the prospect of explorers in this region. The fragment, which was at first regarded (Köhler, *ibid.*) as a part of a treatise on a grammatical subject, is a stone 0·10 m. in thickness, used as part of a door-sill or for a similar purpose, and presenting a surface of 0·26 m. × 0·16 m. It is given in illustration by Gitlbauer (*D. dr. S.* Taf. i.). I have here set down (i) its principal contents (the rest are the beginnings of the lines of the next column, very fragmentary); and have placed by it the restored full text as (ii) proposed by Gomperz, and (iii) by Gitlbauer (Gomp. *Ueber ein bisher unbekanntes griech. Schriftsystem* 1884 and *Neue Bemerk. über den ältesten Entwurf einer gr. Kuzzschrift* 1895; and Gitl. *D. dr. S.* Taf. i. and pp. 3 *et seqq.*)

(i)	(ii)	(iii)
<p>I Π ΡΛΕΧΟΥΣΕΝ Ξ·Ι·ΤΟΔΕΠΕΜΠΤΟΝ ΤΩΝΦΩΝΗΕΝΤΩΝ·Υ·</p>	<p>I ζυγός ἐπὶ μέ- σου στελέχους ἐγκάρ- σιος Ι· τὸ δὲ πέμπτον τῶν φωνηέντων Υ</p>	<p>ἡ μὲν οὖν τρίτη τῶν φω- νῶν δίφθογγα ποιεῖται τέσσαρα, ἔχουσι ἓν μόνον κέρας Ι· τὸ δὲ πέμπτον τῶν φωνηέντων Υ</p>










¹ For abbreviations and signs, drawn from the papyri, see F. G. Kenyon, *Pal. Gr. Pap.* (1899), Appendix iv. Cp. E. M. Thompson, *Gr. and Lat. Pal.* cap. vii. But in a forthcoming contribution on *Sematography of the*

Greek Papyri I hope to prove that the sematographic elements in the papyri are not tachygraphic in origin, but are cursive developments.

² Wessely, *Ein. Syst.* p. 3.

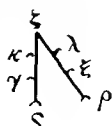
³ Or ὕξος Gomp.

	i.	ii.	iii.
5	ΙΑΜΕΝΠ ΡΟΗΝΕΧ ΠΡΩΤΟ ΟΞΛΑΜ ΞΓΕΡ[Ο]	5 τρία μὲν πρὸς τὴν ὀρθὴν ἔχει κέρα· τὸ δὲ πρῶτον τῶν μακρῶν προσλαμβάνει μὲν ἓν τὸ δὲ ὕστερον δυ' ἐπ' ἅκ.	5 τρία μὲν, πρῶτερον δὲ τὴν ὀρθὴν ἔχον κεραίαν τὸ πρῶτον, τὸ δεύτερον προσλαμβάνον αὐτεῖ κέ- ρας ὕστερον, τὸ τρίτον
10	ΣΚΕΡΑΙΑΙΞΑΜΦ - - - ΤΗΣΟΡΘΗΣΑΠ Ι[Ν]ΟΥΝΦΩΝΙ ΡΑΦΕΙΝΟΥ ΔΑΦΩΝΩΝΗ	10 ραῖς κερααῖαι ἀμφοτέ- ραις, τῆς ὀρθῆς ἀποκλι- νῆς· τὴν οὖν φωνὴν μὲν διαγράφειν οὐ δέον· τῶν δ' ἀφώνων ἡ μὲν	10 ταῖς κερααῖαις ἀμφοτέ- ραις, τῆς ὀρθῆς ἀποκλι- νον, τὴν οὖν φωνὴν μὲν δεῖ γράφειν οὕτως· τῶν δ' ἀφώνων ἡ μὲν
15	ΞΕΙΑΚΑΙΒΡΑ ΜΜΗ ΥΦΩΝΗΕΝΤΟΣ ΙΕΐΤΕΘΕΙΞΑΔΥ [Α]	15 εὐθεῖα καὶ βραχεῖα γραμμῇ, ταῦ φωνήεντος κά- τω μὲν τεθεῖσα δύναται δέλτα	15 εὐθεῖα καὶ βραχεῖα γραμμῇ τοῦ φωνήεντος ἐν μέ- σω μὲν τεθεῖσα δύναται δέλτα
20	ΔΕΤΑΥ ΕΤΕΙΤΕΛΕΥΤΕΙ·ΝΥ· ΑΔΕΠΙΤΗΝΑΡΧΗΝ ΡΟΣΗΓΜΕΝΗ·ΠΕΙ ΤΕΙΤΕΛΕΥΤΕΙ·ΜΥ·	20 ἐπάνω δὲ ταῦ πρὸς δὲ τεῖ τελευτεῖ νῦ μετεώρα δ' ἐπὶ τὴν ἀρχὴν μὲν προσηγμένη πεῖ, πρὸς δὲ τεῖ τελευτεῖ μῦ·	20 ἀρχεῖ δὲ ταῦ πρὸς δὲ τεῖ τελευτεῖ· νῦ· πλαγία δ' ἐπὶ τὴν ἀρχὴν μὲν προσηγμένη πεῖ· πρὸς δὲ τεῖ τελευτεῖ· μῦ·
25	Υ . . ΣΟΝΠΡΟΣ ΗΝΑΡΧΗΝΠΡΟΣΗ ΝΗ·ΒΗΤΑ	25 κατὰ δὲ τὸ μέσον πρὸς μὲν τὴν ἀρχὴν προση- γμένη βῆτα πρὸς δὲ τεῖ τελευτεῖ ψεῖ·	25 κατὰ δὲ μέσον πρὸς μὲν τὴν ἀρχὴν προση- γμένη· βῆτα πρὸς δὲ τὴν τελευτὴν γάμμα)

The former of these restorations is chiefly interesting as illustrating the general nature of possible *variae lectiones* upon such a text, and to that extent confirming the opinion that it deals with some system of shorthand-writing, Professor Gomperz being not specially a student of tachygraphy (*New Bsmark*, (1895) p. 7). I may freely transcribe: 'The branch or cross-bar resting upon the middle of the upright stem (sc. ) is I; the fifth of the vowels, T, is represented by three small oblique strokes against the perpendicular (sc. ) ; the first of the long vowels adds one (sc.  = A); and the last takes two, on the tops of the two horns which replace the perpendicular (sc. ). No diagram is required to illustrate these vowel signs. Of the consonants the short horizontal stroke, when placed underneath the vowel-sign, signifies Delta (sc. ); above it, Tau (); at the end Nu (); at the upper left-hand side Pi (); at the upper right-hand ()

Mu; when placed in the middle, at the beginning it signifies Beta ($\frac{\text{v}}{\text{v}}$) and at the end Psi ($\frac{\text{v}}{\text{v}}$).¹

Adhering to the phonetic system upon which this arrangement seems to be made, Professor Gomperz found that he could construct a similar table for the remaining consonants thus, all except θ and ϕ . The not very own reading (e.g. $\pi\rho\acute{o}s\ \mu\acute{\epsilon}v\ \tau\acute{\eta}v$) is a less serious matter than the complexity of the signs which he obtains for his alphabet. What could be done with such vowel-signs as

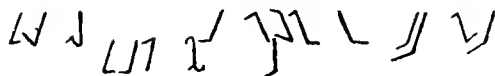


so that he has accounted for consistent application of his $\acute{\alpha}\rho\chi\eta\nu\ldots\pi\rho\acute{o}s\ \delta\acute{\epsilon}\ \tau\epsilon\acute{\iota}\ \tau\epsilon\lambda\epsilon\upsilon\tau\epsilon\acute{\iota}$ complexity of the signs which

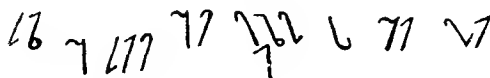
E , \vee , ψ ? The only gain to our knowledge of tachygraphy from this scheme is the hint that it was written by geometrical outlines as opposed to *sigla*¹ and contracted common-hand, a view adopted by Dr. Gitlbauer, and confirmed by the remains of later (third century) tachygraphy which are extant (British Museum MSS. Add. 33,270): Gomperz compares it, as regards the point of view, with such modern systems as Pitman's.

Ten years later than Prof. Gomperz, Dr. Gitlbauer proposed his restoration, and having an intimate acquaintance with later tachygraphy, he was able to offer at least a more practical² solution. On Taf. iv. of *Die drei Systeme*, he gives the first ten lines of the *Odyssey* written in three hypothetical styles or phases of the general system (Taf. iii. A.B.C.) which he deduces from the Acropolis inscription, in conformity with philosophical laws of mind and speech and with the later system. The first lines (i.e. *Od.* i. 1 in three styles) present the following appearance:

A.—'XENOPHONTEISCHES SYSTEM'



B.—'CREATIVE SYSTEM'



¹ For the gender, Just, *Ep. ad Antecess.* § 8; *Od.* Cod. 1, 17, 2, § 22. There is no support for '*siglae*' in White and Rid. vii. edit., nor Lewis and Short, 1879.

² There is, happily, no need for the tachygraphic reader to attempt to decide between the rival restorations. The bare text of the inscription itself is sufficiently convincing that we have here a reference to some system of writing the letters of the alphabet, grouped as vowels and consonants, by means of dots or small signs (*κεφαλαί*) placed in significant positions around some (apparently geometrical) figures of

a larger kind. I think I am safe even from controversy in reading: Γ τὸ δὲ πέμπτου τῶν φωνηέντων Υ . πρὸς τὴν ὀρθὴν .. κεφαλαίς ἀμφοτέραις. τῆς ὀρθῆς ἀπ. τὴν οὖν φωνήν. γράφειν δ' ἀφώνων ἢ μὲν εὐθεῖα καὶ βραχεῖα γραμμῇ. τοῦ φωνήεντος τεθείσα δύναται Δ δὲ Υ . πρὸς δὲ τῇ τελευτῇ Ν. (πλαγία) δὲ ἐπὶ τὴν ἀρχὴν μὲν προσηγμένη Π, πρὸς δὲ τεῖ τελευτεῖ Μ· κατὰ δὲ τὸ μέσον πρὸς μὲν τὴν ἀρχὴν προσηγμένη Β. This is quite enough to prove the point.

For Gomperz' fuller reply see, however, *Neue Bemerkungen über den ältesten Entwurf einer griechischen Kurseschrift*, 1895, Wien.

C.—‘MINUSKEL SYSTEM’

The reader will have no doubt of the meaning of the various signs, since the division is strictly syllabic. They are admirably simple in A and B, and free from much reproach on that score in C, which is familiar to us from the 10th century MSS. Indeed, for syllabic representation, B presents one of the most concise systems ever invented, being obviously superior within those limits to the favourite modern English system, ‘Phonography,’ which uses *detached* vowel-signs. But no sooner are those limits passed than the impracticability of all three alike is manifest. And here we are face to face with the *false assumption that full syllabic representation can be the method of a practicable tachygraphy*. Its formal disproof would be out of place here, but this is hardly necessary, with the example of the ‘Tironian’ and modern systems before us. Since, however, our author (p. 47) compares this syllabic method with the ‘Tironian’ use of contracted word- and phrase-signs to the great disadvantage of the latter, it is not out of place to insist upon the one supreme recommendation of any method of tachygraphy, and to ask whether the intellectual achievement is not higher in carrying forward a system of abbreviation and simplification of form until the maximum brevity consistent with perspicuity is attained, than in applying syllable by syllable a compact syllabarium? For, as will be seen from illustrations in the following pages, a syllabic writing, in which all the syllables are represented by detached signs, could not be even expected to keep pace with speech.¹ Still, any system may have its syllabic *stage* of development, and we may therefore consider the value of syllabic reconstructions and remains of systems as guiding us in tracing them in further stages.

Leaving, however, the consideration of ultimate practicability, let us ask what documentary materials are here employed. We find none, except those deduced from the restoration of the fragment, and those borrowed from the later MSS. We might therefore be obliged to content ourselves with an examination of probabilities—and in this light Dr. Gitlbauer’s first two phases will be seen to be not only ingenious but reasonable and valuable suggestions,²—were it not that the next of the sources for tachygraphic forms

¹ Although the practical question demands, for complete demonstration, the skill of a practised stenographer, the general reader may satisfy himself by an easy test. Let him put down for every short syllable a small vertical stroke and for every long a longer bar, and let him try to set them down, as they are spoken, at the lowest *ordinary* rate of speed, and so to record the syllables of the first ten lines of the *Odyssey* at the dictation of a friend. Thus

Ἀνδρα μοι ἔρρενε, Μοῦσα } and so on
 | | | | | | |

Only by such a trial will he realise the inadequacy of the best efforts of the hand for keeping pace with speech, except by the merest suggestions of words or phrases. I find that in ordinary speech the syllables are spoken as fast as the semiquavers are played (metronome-time)

² = 109. Cp. Noldeke, *Tachygr. bei den Orientalen* in *Archiv für Sprachwissenschaft*, Feb. 1901, esp. p. 26. ll. 2, 3.

³ I can only regret that the limited space at my disposal here has made it impossible to do justice to the many convincing conclusions to

(Nos. (ii)—(v) in the list above) furnish us with direct comparison. In each case, comparison resolves itself into contrast. The four Leipzig fragments are so much injured by time that their service is small, yet they show a marked dissimilarity to the Gitlbauer rectilinear simplicity of outline and an equal similarity to the more intricate forms of their contemporary fragments.

The general style may be, provisionally, sufficiently well judged from the 3rd century tachygraphy of Brit. Mus. Add. MS. 33270 (*cide* Plate XVIII.). These all have geometrical forms of all kinds and in all possible positions, which is one of their best recommendations,¹ and at the same time discredits almost finally the rectilinear systems. See the illustrations² of the Leyden subscription 106-5 B.C. for striking confirmation from the oldest written series of forms admitted to be pure tachygraphy. And even the tiny line in the British Museum papyrus exxi. gives the same testimony.

The materials out of which Dr. Wessely's *System altgriechischer Tachygraphie* is constructed are on the contrary not hypothetical. They are, indeed, the most certain portion of the older remains. Their great weakness, as evidence for *old* Greek tachygraphy, is their late date, 5th century at the earliest. We may, however, claim them against the Gitlbauer-Cursives-System, to which they are almost antagonistic, in detail. For example:

HYPOTHETICAL (GITLE. TAF. II. B.).

DOCUMENTARY (WESSELY, pp. 18 sqq.)

α, υ, η /, ' |
 οι, ο. ω |, \, \,
 ε, αι, ου /, \, \ or l
 σα, ασ γ, λ
 σε, ες, οι γ, λ, γ
 ευ, αυ, ευς ✓, \, ~
 ουν, λου h, γ

—, Y or √, /
 †, \, C or ∩
 ∩, †, U
 L, γ
 ε, ∩ or ∩, γ
 γ, †, ✓
 —, ∩ (restored)

which Dr. Gitlbauer has come. One interesting principle is that the whole vowel-system of the earliest system was built up of vertical strokes, while the consonant-system was horizontal. 'Die drei Systeme' is, apart from the proposed restoration, a storehouse of tachygraphic learning.

¹ Much has been urged, in recent years, against a 'geometrical' shorthand. But this is always as compared with a flowing hand, resembling ordinary writing, not as compared with a rectilinear. I do not admit that the

distinction is just, for the ordinary hand has as many geometric lines and curves as, for instance, Phonography. The *Duplone* system is, I consider, quite as obnoxious to the same charge. But if it were just, it would only imply the greater condemnation of a rectilinear system, which is geometric at a most remorseless stage. Gitlbauer's (A and B) even avoids the horizontal.

² 

HYPOTHETICAL (GILBE, Taf. II. B.)	DOCUMENTARY (WESSELY, pp. 18 <i>sqq.</i>)
$\alpha\pi$, $\alpha\tau$ L , L	L , $+$
$\tau\alpha$, $\alpha\rho$ 7 , 6	L , \checkmark or \checkmark

Nothing could be more certain than many of these readings of Wessely's, transcribed as they are in the plainest manner in the common-hand, and these giving the clue, thanks to an orderly arrangement, to the rest. They admit the use of the semicircle and other curves very freely, thereby adding largely to their resources, while standing contrasted in this respect with the *Cursives System* and still more markedly with the *Xenophonteisches*. These latter must, it will be admitted, be regarded as driven from the field, along with the method of syllabic representation by rectilinear forms, using the vertical positions only, which they illustrate. Unless, indeed, they take refuge in the hypothesis that this was a system which had no descendants, but then what becomes of the strongest support for the few sure Giltbauer-readings, e.g. for L $\alpha\nu$ L $\epsilon\nu$?

The fragments (nos. vi. and vii. in the list above) which have given Dr. Wessely a basis for his 'Darstellung' (*Ein Syst. altg. Tach.* pp. 31 *et sqq.*) deserve a fuller description. The papyrus fragments are three in number. The first, of the 5th ('6th) century, to judge by the half-uncial common-hand which is mixed with the stenographic forms, was among the proceeds of the first Fayum discoveries; it may be seen in facsimile (*Corpus Pap. Raineri*, Taf. xiii, 444, Vienna, 1895; cp. Wess. *Ein S.* Taf. i.). It contains about 40 tachygraphic signs, each with its transcription in the ordinary hand, viz. α , ϵ , η , ι , σ ... $\alpha\iota$, $\alpha\nu$, $\epsilon\nu$... $\eta\nu$, $\iota\nu$, $\sigma\nu$, $\nu\nu$, $\omega\nu$, $\alpha\nu\nu$, $\epsilon\nu\nu$... $\epsilon(\sigma)$, $\eta(\sigma)$, $\iota(\sigma)$, $\sigma(\sigma)$, $\nu(\sigma)$, $\omega(\sigma)$, $\alpha(\iota)\sigma$, $\alpha(\nu)\sigma$... $\sigma\nu\sigma$, $\alpha\rho$, $\epsilon\rho$, $\eta\rho$, $\iota\rho$, $\sigma\rho$, $\nu\rho$, $\alpha\rho\rho$, $\sigma\rho\rho$, $\alpha\lambda$, $\epsilon\lambda$, $\eta\lambda$, $\iota\lambda$, $\sigma\lambda$,... $\alpha\nu(\lambda)$, $\epsilon\nu(\lambda)$, $\sigma(\lambda)$, $\nu(\lambda)$, and six or eight partially preserved. The fragment is in two pieces and no margin is intact. Two other papyrus fragments (Wess. Taf. iii, 9, 10) from Heimopolis Magna in the same collection have similar signs slightly more complex. There is here no transcription, but among them are found some of those already mentioned. From these three Wessely, aided by previous knowledge of the general system and of the 10th century syllabaries, and by those of wax tablets in the same series, has come to a decision concerning about 250 signs. The wax tablets, nos. 46—50, are seven fragments which appear from their nearly uniform height (16.4 cm., 16.6 cm., 17.0 cm.) and width of margin, to be pages of similar waxen books,¹ like that in the British Museum. These fragments contain 143 signs, with the transcripts of 47, viz. $\epsilon\nu$, $\eta\nu$, $\iota(\nu)$, $\sigma\nu$, $\nu\nu$, $\omega\nu$, $\alpha\nu\nu$, $\epsilon\nu\nu$, $\sigma\nu\nu$, $\alpha\sigma$, $\epsilon\sigma$, $\eta\sigma$, $\iota\sigma$, $\sigma\sigma$, $\nu\sigma$, $\omega\sigma$, $\alpha\iota\sigma$, $\alpha\nu\sigma$, $\epsilon\nu\sigma$, $\epsilon\iota\sigma$, $\sigma\iota\sigma$, $\sigma\nu\sigma$, $\alpha\pi$, $\epsilon\pi$, $\eta\pi$, $\iota\pi$, $\sigma\pi$, $\nu\pi$, $\omega\pi$, $(\alpha)\tau$, $\epsilon\tau$, $\epsilon(\nu\rho)$, $\sigma\rho$, $\nu(\rho)$, $\alpha\lambda$, $\epsilon\lambda$, $\eta\lambda$, $\iota\lambda$, $\sigma\lambda$, $\nu(\lambda)$, $\omega\lambda$ and 6 others. I have included here some which are so carelessly written as to be indistinguishable, but, as will be noticed, a certain order in the succession of vowels and diphthongs is strictly kept, both in this and in the papyrus-fragments, so that it is easy to see from the

¹ The transcription is in different hands in different fragments, so that we may have here the dictated practice of a school or schools of boys or slaves.

context what was intended. We have now had 400 symbols, 87 of them transcribed. Of the latter some are repeated, adding certainty to the readings while diminishing the number of new forms; but then many of those without transcription have common elements with these, so that, adding and deducting, we have a final list of about 150—160 gains.

We have now seen that the reconstructions which the 1884 Acropolis-stone made possible have given us no certain readings that are new, while the Rainer fragments have yielded, let us say, 150, most of them quite certain. They are all, except the simple vowels, syllables of two and three letters, represented by two-membered and three-membered symbols respectively.¹ These, eked out with what the MSS. abbreviations supply, make up Dr. Wessely's *System of Old Greek Tachygraphy*. What, however, is the true value of these gains? The answer is, first, that we have a portion of a tachygraphic syllabarium, constructed on a slightly phonetic principle, in which all possible syllabic groupings are arranged with respect to the vowels. Thus the whole system would be given under six heads:—

- (1) single vowels (including diphthongs) *eg.* α, ι.²
- (2) vowel+consonant, *eg.* ατ, αις.³
- (3) consonant+vowel, *eg.* σα, τι.⁴
- (4) consonant+vowel+consonant, *eg.* σαλ, τωρ.⁵
- (5) initial-consonant-group+vowel, as in χθόνιος, πνεῦμα.⁶
- (6) final vowel groups (vowel+vowel), *eg.* -αω, -οω, -εια, -ιοι.⁷

These for practical purposes would, on this principle of arrangement, exhaust all the possible cases, since medial consonant-groups could be resolved, *eg.* θρῦπ-τω, and final they are of very rare occurrence. The Rainer-fragments contain no examples of the fifth class, but they are to be seen elsewhere.⁶ The sixth I have seen nowhere illustrated. This certainty of a vowel-basis⁸ to the system—we may accept this syllabarium for the present as part of a current system, perfected elsewhere—is an important and interesting discovery, especially as the contemporary 'Tironian' inclines strongly to a consonant-basis, as O. Lehmann⁹ has suggested that the diacritic dot was originally the vowel-sign, and as the leading English system relies wholly on vowel 'dots and dashes,' building up the word around its consonant-outline.

¹ U=ov is an exception.

² —, |.

³ + 3

⁴ 2 1

⁵ 4 9

⁶ Cp. (p. 240) *supra* φ ρ ι φ ρ ε κ λ ι

κ π τ though the readings are not sure. The more common expedient, in accepted readings,

is a superscript letter *eg.* πρ^εο, πρ^ευ

⁷ For these no provision has been made.

⁸ This rests not alone on this arrangement. The [το]ϋ φωνήεντος in the inscription (l. 17) indicates the upright-stem against which the consonant-ticks are to be written.

⁹ *Questiões de notas Tironicas et Saceræ*, Leipzig, 1869

It is hardly necessary to say that we have here a small part only of a complete syllabarium of the Greek language. Of the 442 pairs which may be formed of a vowel¹ and a consonant, this accounts for 83; while of the whole number of permutations possible to the letters of the Greek alphabet taken three and three, a vowel always between two consonants, nearly 3,600,² we have certainly not a hundred. It would be a tedious task to discover by inspection how many of these are actually unused in practice, but we may set them against all the consonant-pairs (such as $\pi\tau$, $\mu\nu$, $\chi\theta$) for which no calculation has been made, and which would fill a considerable part of the list. We shall hardly be wrong then in saying that a full Greek syllabary, when completed on this plan, would require upwards of 4,000 signs.³ Towards this number, in the earlier tachygraphic system, we know fewer than 200! To judge by the curious postscript of Cod. Paris. Gr. 1056 (Sacc. X or XI) the signs might in practice be used on the principle $\gamma\upsilon\nu = \gamma\nu\omega$, $\gamma\alpha\rho = \gamma\rho\alpha$, but even allowing for the utmost licence short of absolute confusion, we can only regard our fullest list of certain syllabic symbols as hopelessly inadequate to the task of writing Greek at all.

Supposing, however, that the list was once complete, to what extent was it capable of writing Greek *rapidly*? As already stated, it could never have been of service for verbatim 'reporting' of ordinary speech. But developed, contracted and grouped, the same signs may well have been those in actual use for the purpose. They exhibit a resourcefulness which would make such development easy. Already in the Rainer-fragments we have variants of the simple signs, e.g. of σ , ω .⁴ Now, if we can write e.g. Omikron either by an oval ov or by a bar, leaning to right or left to indicate a change of meaning ($\backslash = ov$ $/ = os$) we can represent $\delta\delta\acute{o}\nu\tau\omicron\varsigma$, conventionally but systematically, by O^* or similar group.

But of this higher stage of development we have none but the slightest hints in any of the tachygraphic syllabaries or decipherments yet published. It is left for the fifth of the sources, if any, on our detailed list above, the waxen book (Brit. Mus. Add. MSS. 33270), to furnish us with examples of a stage in advance of the syllabic. This MS.⁵ has been many years in the British Museum and has been long identified as containing tachygraphy, yet it has had no mention, as far as I know, in any contribution on the subject—which is the more surprising, as it is in several respects unique. It is thus described in the official catalogue: 'a waxen book, consisting of seven

¹ Including diphthongs.

² The calculation by the ordinary formula gives 3536.

³ For although the immense preponderance of vowel-endings dispenses with nearly all *unad* consonants except s and ν , yet these vowel-endings are so frequently vowel-pairs, $-a\omega$, $-\epsilon\omega$, $-\iota\sigma$, $-\epsilon\iota\alpha$, &c., that our sixth class would be a large one.

⁴ e.g. $\int op \backslash, ov \quad O = o \quad \cap \quad \omega\nu \quad \int \quad \omega\sigma$

⁵ I owe to Dr F. G. Kenyon my acquaint-

ance with it, and I desire to express my warm thanks to him, and to Professor Ernest Gardner, for guidance and kind help in the collection of materials for this paper. Dr. Kenyon tells me also that the numerous undeciphered passages of tachygraphy, to which I have referred above, and which are quoted (Wessely, *Ein Syst.*) under the comprehensive title 'Muscées Nationaux, Nos.,' &c., are at the Louvre, but that there are neither published catalogue nor facsimiles.

wooden tablets, coated with black wax on both sides, and two covers, waxed on the inner side. Inscribed with documents written with a stylus in tachygraphic symbols; with similar symbols written repeatedly, as if for practice; and with a few memoranda in Greek, being a list of names and notes concerning works and the carriage of chaff or bran (*ἄχυρα*) by water. In one of the covers a groove is hollowed for the reception of the writing implement. The leathern thong with which the book was bound round and fragments of the leather laces which formed the hinges remain. III century (?) $8\frac{3}{4} \times 6\frac{3}{4}$ ins.'


The memoranda in Greek comprise half a dozen such disjointed phrases as *περι του πεμφαι τα πλοια των θρυσιλιτων επι αχυρα. περι του ποιησαι Σαραποδωρον μισθωσασθαι τους εργατας*, in hastily written characters, in the midst of which are two or three half-tachygraphic signs, in one of which we have the same $\checkmark = ar$ as in the Rainer papyrus, the longhand equivalent being written at the same place in the same word in the line above. We have also $\pi' \text{ του} = \text{περὶ τοῦ}$ in the first line, with a variation in the last line π^{\sim} . And lastly we have a rather interesting $\swarrow \times = a\chi(v\alpha)$, an instinctive grouping showing the same tendency.

These memoranda occupy, however, but a very small part of the tablets (with the names, somewhat less than a page) and are quite dissociated from the tachygraphic writing by being written upside-down in respect to it; and they appear as though they had been so found by the writer of the shorthand notes when he filled up the rest; the memoranda have been cancelled by a stroke of the stylus.

The tachygraphic writing covers almost completely the remaining parts of the whole book, giving about fourteen pages of pure tachygraphy. It might be misleading to speak more precisely of the quantity of the material thus presented owing partly to the very unequal distribution, and to the frequent repetition, as if for practice, of most of the signs and even of the phrases.

There need, however, be no hesitation in saying that we have here the longest specimen of tachygraphy of the Roman or early-Byzantine periods which is extant, and perhaps the only documentary source of it which exists intact from cover to cover.


The tachygraphy it contains falls naturally under two heads: continuous phrases (? sentences), parts or the whole of which are found almost exactly repeated (see p. 257 below); and pages of single signs written each thrice or four times over and following a certain order, which fortunately is found repeated in two parts of the book. The phrases are made up of groups of the signs found in the other portion, and written both in a larger hand and in more open array than the pages of single signs. The only positive internal clues to the meanings which are to be found are in the *ap*-signs already mentioned; in the word beginning with *παρεσ-* which is written in cursive over the sign¹ in which the same $\checkmark = ap$ appears again and in

¹  cp. the π and the *ap* of the Rainer-fragment.

which the π is well known to 10th century tachygraphy and to the Rainer fragments: in the $\sigma\tau\omicron\lambda\alpha\iota\varsigma$, also in cursive, written over an apparently 'bungled' attempt¹ to write it syllabically, where the σ is already known to us as $\epsilon\varsigma$, the $\tau\omicron$ though new to tachygraphy is probably the same — which we have seen among the memoranda, and the next sign is familiar as $\lambda\omicron$ after which is written, but cancelled, the equally familiar $\alpha\iota\varsigma$ -sign; in the hastily-written characters which seem to be $-\sigma\tau\epsilon\iota\lambda\epsilon\nu$, written over the last sign² in the third line of one of the large-hand pages, and which we may directly compare with the $\sigma\tau\omicron\lambda\alpha\iota\varsigma$ last mentioned (*vide* the signs in notes 1 and 2): and lastly in the cursive word $\delta\alpha\sigma\iota$ which is written above a form hard to reconcile with such a transcript. These are all³ in the large-hand portion among the phrases: there is no such transcription of any word in the closely written pages of single signs, but as a compensation for that we have the order which is preserved, and which enables us to conclude, by comparison with the transcribed signs, that we have here another syllabarium. Now a syllabarium even when hastily written from dictation or for practice and without transcription, as this is, may by the order alphabetical or phonetic which it preserves guide to the discovery of the principle of its construction and so to the meaning of the signs.

We have a convenient starting point for such an investigation in the line exhibiting an unmistakable modification of $\Pi P \Sigma$ ⁴ in which we have tachygraphic (three) or modified cursive (the second) forms for ξ , π , ρ , σ , each with a vowel or vowel + consonant. I have besides found what I think was the starting point for the whole of this dictation lesson, and I shall I hope be able in a subsequent contribution to submit the results of a detailed examination of these pages, the chief of which will be an addition of some signs to Wessely's syllabary (*Ein. Syst.* p. 30).

But it is not in syllabaries, I believe, that we shall find the key to the secrets which still remain locked up in the remains of the Greek tachygraphy. No living scholar probably is better acquainted with the 10th century tachy-

1  (cursive)

2 

¹ Except a few hardly legible marks, one of which seems to be a word ending in $\sigma\tau\epsilon\iota\lambda\epsilon\nu$, another perhaps a word beginning with ϵ ; and some notes which may prove to be either long-hand numerals or additional signs.

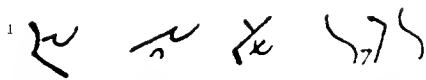
⁴ It commences with



Taking the page inside front cover, inverted, as p. 1, the four symbols just given occur in l. 1. The series which begins from this point is to be found again on p. 14 (counting to the end of book, inverting, and continuing the counting) at the fifth line from bottom. Reading backwards from this sign, twenty or thirty correspondences can be traced. The whole series

perhaps begins at p. 3 (inverted) at the top, after the usual paragraph mark, where the first five signs, each of which is repeated several times, are surely = α , β , γ , δ , ϵ . This page is carried on at p. 1 (inverted). The last signs of all are perhaps ϕ and χ , after which are to be discerned two paragraph-strokes, signs of a finished task (?).

graphy, which is entirely syllabic, than Dr. Michael Giltbauer, to whom we owe the decipherment in 1878 of the Cod. Vat. Græc. 1809. Yet he was unable to offer any interpretation of these 3rd century shorthand notes when he had them in hand some fifteen years ago. A syllabic system not being conceivable as a final stage of a practical shorthand, we must look for some examples of the application of our syllabic elements to the written word. By great good fortune we have in these tablets both a syllabarium and continuous writing side by side. By the help of the former we may study in the latter a higher stage of tachygraphy than we have seen in the Rainer papyri or wax-tablets. We have a system of grouping which is a distinct advance on the method in which separate syllables are written in a row. There is the large outline, or body, of the word, capable of standing in faster writing for the whole, and there is the smaller member, or members, adding perhaps the endings or connecting syllables *e.g.* in the conjectural ἐλπ[ις], τοῦ ξενίου, ἐσπέρης [ησ-].¹ It is not difficult to see meanings of this kind, especially when there is the presumption that one is dealing with a dictated exercise either from a fixed vocabulary or from a book of phrases. Thus it seemed tempting to force upon the first line of the first page written in the larger hand the meaning τούτων τῶν υἱῶν...καὶ...τῶν Ἑλλήνων ἡγητῆρ (or πατῆρ) Ἕλλην. As a reading from tachygraphy it would be at least as safe as that of the Leyden MS.,² where κλεοπατρα-πτολεμαῖος is proposed³ for Ἀπολλωνίος κεχρηματικά; and it would help to explain the presence of the mysterious 'δασι,' the 'παρεστειλεν' and the 'στολαις,' which, difficult as they are to connect with the language of daily life, easily suggest the small passages from poets, etc., used as 'copies' or dictated. But such is the nature of tachygraphy that conjecture must be used with the utmost caution.⁴ Nothing is easier than to force a meaning, nothing more possible than for a plausible reading to be *toto caelo* wrong. What more reasonable than to conjecture ποῦ for the π̄ already mentioned which occurs in these pages? Nothing but previous knowledge or a plain context could have told us to read π' τοῦ (= περὶ τοῦ). Supposing that Greek tachygraphy was developed as the laws of psychology and actual experience, as we shall see presently, lead us to expect that it would be, then a group of syllables instead of represent-


¹ 

which seem indeed to be simple groupings of the familiar or the new signs (the ξ is confirmed by the small-hand syllabary), but may be here phrase-signs, for instance for (i) ἐλπ[ις] τοῦ, (ii) τοῦ[τ]ων, (iii) ξερ[οδ]ου (·χου) or (taking the tick as perpendicular) υἱ[ε]ς Ἀ[λ]α[ι]ω[ν], (iv) ἡσ[αν] δὲ ἐρ[μην]εῖς (·ης), contractions formed as in Thonnan, and, more highly developed, in modern shorthand.

² *Vale supra* p. 213 (n.) and 249 n. 2.

³ With good reason I think. The newer reading is Gardthausen's, and satisfies more


nearly the requirements of the shorthand forms



The point however is that conjecture here is more than ordinarily uncertain, as it would be far more reasonable, from the point of view of the rapid writer, to find a whole sentence in that extent of outline.

⁴ In the decipherment of those extensive passages of later tachygraphy which have been deciphered, the key was given by marginal and other transcriptions. These are at present wholly lacking for the earlier fragments.

ing the single word they may seem, rather doubtfully, to make up, would more probably represent a group of words, their chief 'outlines' blended according to certain rules, which would be no more difficult for the writer to remember, and far more serviceable, than the thousands¹ of syllables required for the complete syllabary of a language.



To take an illustration from modern phonography in a simple sentence of ordinary phrases such as 'The House of Commons and the House of Lords,'² the reporter, whose system it may be is built up most systematically out of elements very similar to those presented in the syllabaries, actually writes signs which, read as simple elements, may be very justly transcribed as 'The Husk and the Hazel' yet which have not and could not possibly have any such ambiguity for him, in the context. But conversely, it would be utterly misleading for the decipherer, if he were not acquainted with this principle. When he finds , for instance, in 'Tironian,' he must suspect, *not a part of a word* into which these elements enter, but a phrase or a long word; in fact, he has *in consilio*.



In regard to the nature of the groupings in the waxen-book, I have no doubt of their forming part of attempts³ to record complete sentences, and it may be continuous passages in some pages.

But, during numberless perusals of these 'sentences,' I have found myself continually hovering in opinion between two conclusions, on the one hand that the groups are examples of an advanced stage of the system, and are to be read as phrases or condensations of long words; on the other hand, that they are the next stage only beyond the (?syllabic) practice of the smaller pages, and consist simply of constituent syllables of single words, grouped together as principal and subordinate members, preparatory to the ellipsis of the latter in the skeleton-outline of the succeeding stage. In both cases the same elements would present themselves, as already shown, and the general appearance might be the same. There is no internal evidence to guide, and could hardly be any. Some external indication is required. I prefer, therefore, to withhold a conjectural decipherment until I have come to final conclusions with regard to the signs of the syllabarium, and meanwhile to submit to the tachygraphic student those results of which I am certain. They are exhibited in these parallels (shown on p. 257) which I find in the pages of larger-hand. It will be observed that as many as six repetitions may be traced of the same phrase, with slight variations, which may suggest to the reader a better clue than I have yet obtained. One variant is especially worth notice,⁴ where the Wessely-form of $\epsilon\lambda$ and that of $\eta\lambda$ are interchanged. In one place I have found the sign for η struck over the $\epsilon\lambda$ -sign as if to

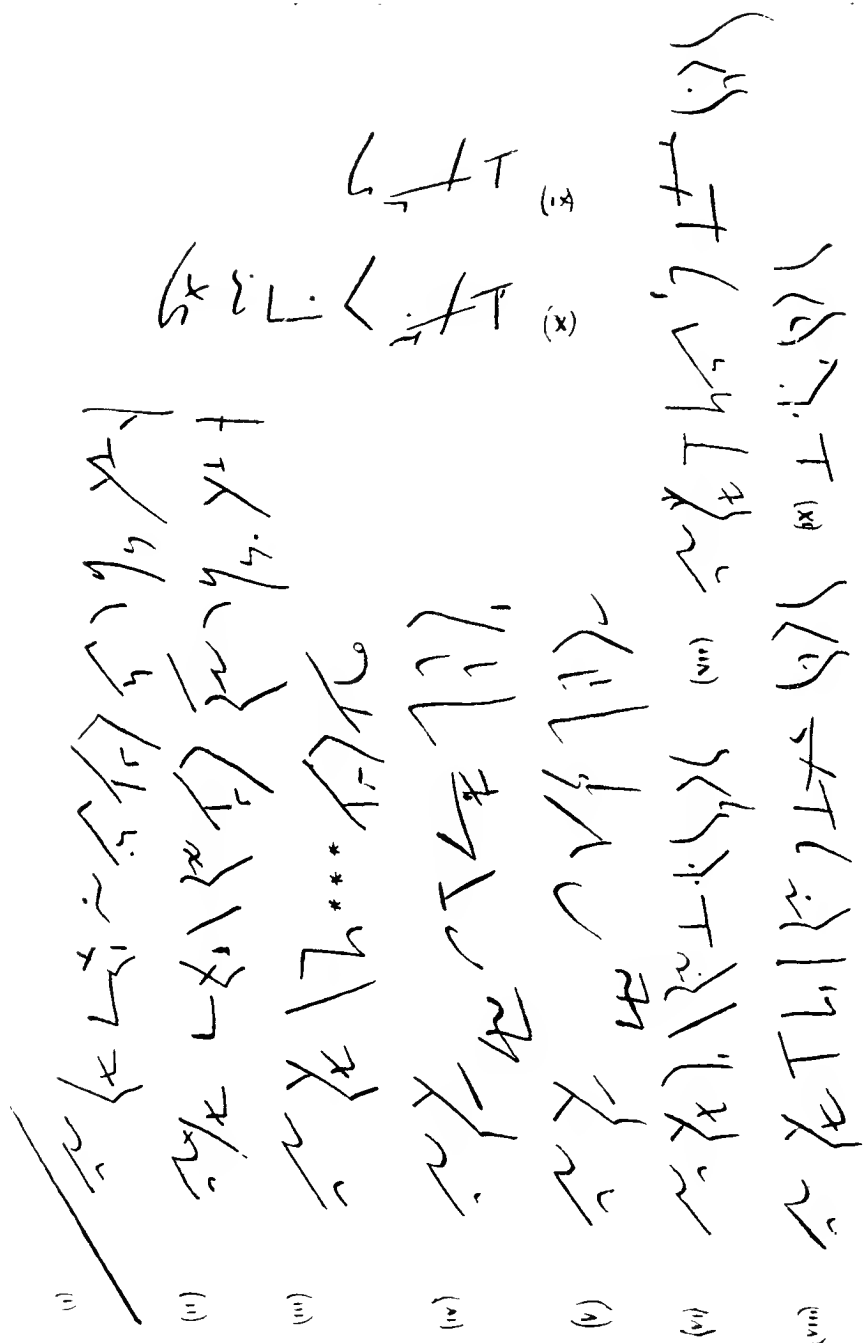
¹ See p. 252 *supra* for grounds for my estimate at 3,600 (roughly).

³ In a few places there are corrections, either in similar characters or in the common-hand.

⁴  for 

i.e. a dot, $hs + k$ ($= c$), and \dagger the, $hs + l$.



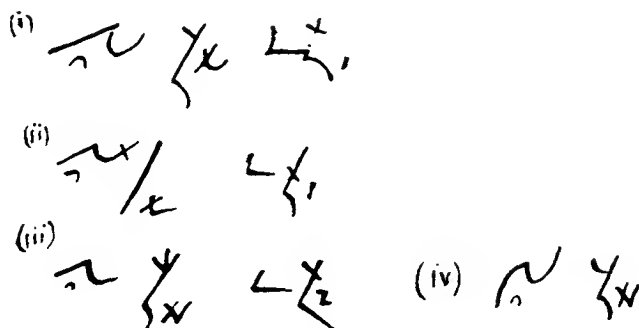
suggest correction. On the latter supposition the more obvious $\epsilon\lambda\pi\iota\varsigma$ ¹ would be untenable, and we may take the carelessly-written $-\pi\iota\varsigma$ -sign (i) for a well-

¹ $\epsilon\lambda\pi\iota\varsigma$ for $\epsilon\lambda\pi\iota\varsigma$

made λου-sign, or (ii) for a careless που-sign, and then in (i) ηλ-λου or (ii) ηλ-που may perhaps read in (i) ἡλίου ἀνατελλομένου, or in (ii) Ἡλυσίου πεδίου. I introduce these quasi-conjectures to insist that there is nothing far-fetched in such readings of such groups,¹ and at the same time to illustrate their extreme uncertainty. The very first word² is a puzzle, and may be a trap. To read the larger part as του would be very safe as a separate reading; it is sufficiently attested. Then what of the Λ? And at once the same fatal multiplicity of possible readings occurs. If του is right then we may take the Λ as an indifferent semicircle (=ων) and read τούτων. But the second member of the του-sign is sometimes more angular and the left arm longer, i.e. τυν (Wessely p. 24); and as once at least the long-arm is crossed, adding perhaps a χ, it is reasonable to read τυγχάνων or τυγχάνω ἔχων. There is obviously no limit to the available rearrangements of this kind.

From the nature of the case, the final forms in a perfected system, though systematic, are as arbitrary as were the first elements and bear only such meaning as the writer has previously associated with them; and the dangers of conjecture are proportionately increased. But although little can be done towards safe annotation of the tachygraphic texts at present known, some contributions may be made by the aid of such representations as those in the British Museum waxen-book and in the Rainer fragments, towards the emendation of the text itself. In many places the writer will be found to have written much more carefully than in others and by a comparison of a recurring word with its antecedent we may establish the normal form.

Thus, if we find in different places, but with similar contexts, these groups,



¹ Cp. Ψ N crossed by T = 'notwithstand-
ing'; \mathcal{N} N crossed by V = 'nevertheless';
similarly — = 'characteristics of the
age' in English phonography; and many illus-
trations in these pages. Cp. Wessely, *Neue
Zauberphara* 1893 for $\phi\lambda\kappa$ = $\phi\upsilon\lambda\alpha\kappa\eta\rho\iota\omicron\nu$
 $\chi\alpha\rho$ = $\chi\alpha\rho\alpha\kappa\eta\tau\eta\rho\alpha\varsigma$, etc. etc.

² — many times recurring in same
position (' as the first word) in the 'sentence.
Following the Rainer-fragments this would
seem to be nearest to $\tau\omicron\nu + \omega\nu$. But as the
initial stroke — is found as a *final* π , it may
here have that meaning initially. The U may
be $\alpha\varsigma$, and this repeated sign may be a name
e.g. $\Pi\alpha\sigma\acute{\iota}\omega\nu$, found elsewhere as a first word on
papyri.

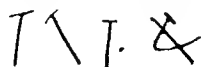
there is some certainty in reading

~ ζ_x Λζ,

even while the meaning remains uncertain. Thus by the help of these new outlines we may be surer of the text in the British Museum Pap. cxxi. 14, col. 27, where one line of quasi-tachygraphy occurs in the midst of cryptographic magical formulae, of which Wessely has identified the word *ἐπίγραφε* (*Ein. Syst.* p. 10), and I venture to give as a full reading: (? *εἰς*) *τὴν αὐτὴν ἐρωτικὴν* or *ἱερατικὴν* (? *χάρτην*) *ἐπίγραφε ταῦτα*. We have, as certainly belonging to the tachygraphy of this 3rd century, the small crossbar horizontally placed on an upright stem (in the familiar sense I think of *av-*), from forms common to the waxen-book, to this 3rd century papyrus, and to the scanty contents of the four Leipzig fragments, though not in the Rainer fragments. These¹ give the readings of *αὐτοὺς*, *αὐτόν*, *αὐτά* or *αὐτό*, and *αὐτόχθον* or some such word. But all these, like the last, are merely possible, for this may be an advanced stage of the system before us, and in dealing with such tachygraphy, *a posteriori* inferences, as we have seen, are almost worthless.


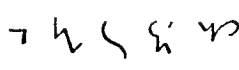
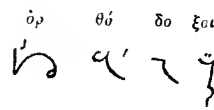

The Bodleian fragments (No. ix. on our list of sources) offer no positive clue for either their own decipherment or that of the Brit. Mus. waxen book. The smaller pieces are too fragmentary to be adduced at the present stage of our acquaintance with earlier tachygraphy, while the one considerable document Gr. el. a 6 (P), being written on the 'back,' or more roughly-handled surface of the papyrus (though this appears to be the *recto*), is much defaced, not more than ten or twelve consecutive signs being anywhere legible. Being apparently of the same age as the Rainer tachygraphic papyri, it is interesting to observe that the separate signs which are at all familiar, bear more resemblance to those of the waxen book, and to general abbreviations (*e.g.* *θ*), than to the Rainer syllabaries, though naturally the latter are not unrepresented. At the least we have here corroboration for some signs found elsewhere, and I think that the key to the remaining fragments of old Greek tachygraphy, whenever it may be found, will unlock the secrets of these also.

We come to the last source from which we may learn of ancient tachygraphic forms: the remains of mediaeval Greek tachygraphy of the 10th—14th centuries. The division of these into 'Italian' and 'African' adopts an opinion expressed by Giltbauer (*D. dr. S.* p. 22) that the phase of tachygraphy in the latter is older and appreciably more nearly related to the earlier system than is the 'Italian' tachygraphy invented at Grottaferrata. The Vatican MS. 1809, transcribed by Giltbauer (*Die Ueberreste gr. Tachygr.*—vide Bibliog. *infra*) is the oldest monument of 'Italian' tachygraphy extant, and the chief

¹ viz.  ep. | = *ovs* \ = *ov*.

source for the syllabary of that phase. But one can scarcely speak of it as a later development of an old Greek system, for it is itself undeveloped. We have here only the direct application of simpler outlines for the letters of the alphabet grouped into syllables, and no further, and used one by one to write down all the component syllables of every Greek word. There could have been little advantage in it, for the slight gain in simplicity is counterbalanced by the paucity of signs, through which *e.g.* *συνομολογεται* stands for *συνομολογηται*. It can be readily followed in a short while by the help of Giltbauer's syllabic transcriptions, and the reader will be convinced as he reads, that the same words written with cursive ligatures or any form of 'tied' letters would be only a little less rapid. Let him look at *ἐγενόμην, ὀρθόδοξοι, δικαιοσύνης*,¹ (fol 195^r b, 214b, l. 8,, and compare the clumsy length of the words with the graphic forms of words of the same phonetic values in modern phonography,² and even, allowing for the difference in the pretensions of the two methods, with the more cursive of the ligatures of the common hand, and there will be wonder that so much trouble should have been taken to effect so little. Why write the signs for *ορ, ξοι, γενο* rather than the ordinary letters, when the same assiduous practice which will increase the speed of the signs would raise the speed of the common hand in the same degree, and when neither of them could by any possibility be written legibly fast enough to follow an ordinary speaker? Why spend upon each syllable as much labour as a modern system spends upon a whole word, and frequently upon a group of words? For instance, the sign for *ε* writes the whole word *which* in English 'phonography,' that for *γε* writes *that which*, that for *νο, I fear*; that for *μην, many turbot* (very nearly); the forms of the single word *ὀρθόδοξοι* would with very little alteration write the whole string of words, *doctors I have could have intestate*. And so on, throughout. Above all, why were these fully written final syllables employed to the exclusion of the serviceable contractions and abbreviations of the MSS.? These questions have indeed considerable interest for the student of the older tachygraphic systems, but they need not further detain us here. It has been sufficiently shown that the latest phase in which Greek tachygraphy is known to us is not superior, from either the practical or the rational point of view, to the older or the oldest phases, and presumably is inferior to them, since, as we shall see, the Roman system was itself superior and shows traces of a Greek origin.

The 'African' tachygraphic remains are almost equally disappointing. The subscription to Cod. Laur. ix. 15 (A.D. 964) is as follows: *πε προς ε ξι*

1	ε γε νο μην	δι και ο συ νης
		
		

(economics, orthodoxy, declensions).

σεν τα λας κλι ρι κος εν επι ,συνοβ' εν Α φρι κι Αν να λι πρεσ βι τε ρο αν τι χι ρο ν (Gittlb. p. 21 and Taf. iii. 24). But it was surely written rather as a cryptograph than a shorthand, although the symbols are tachygraphic.¹ The theory of the quasi-cryptograph, by means of symbols borrowed from the elements of a tachygraphy, would explain some of the more unsatisfactory appearances, which so-called tachygraphy makes in the sources I have cited. On recourse to it the whole argument from probability of course falls to the ground, but then at the same time the importance and general interest of the subject are greatly diminished, and the Roman notes are left alone in possession of the field.

While contributing so little knowledge of the Greek earlier system, however, these later sources are of value as supplying confirmation for some readings in the older syllabaries, and helping us, by their analogy, in filling up the blanks (Wess. pp. 31-44 *passim*).



Now to show that the syllabic methods and the 'new' or 10th century tachygraphy can be reasonably regarded rather as the stunted descendant, or to change the metaphor, the petrified fragment of an earlier and better Greek system, by a comparison with the Roman system, the 'notae Tironianae' or 'Tironis ac Senecae.' Let us survey the whole ground covered by the three 'systems,' (i) the 'new' tachygraphy (ii) the 'old Greek' tachygraphy and (iii) the Roman *notae*.




Of the first we have specimens in long continuous pages; these have been deciphered and proved to be composed of syllabic and alphabetic signs substituted simply for the consecutive syllables or letters of a word.



Of the second we have continuously written pages which have not been convincingly deciphered, but which are not composed in the same way of simple successions of syllables.

The third, the 'Tironian' shorthand, is well known and completely understood, and it is as far as possible from being syllabic. It exhibits the progressive contraction of syllabic groupings into word-outlines, distinguished in cases of confusion by some conventional characteristic,² and passing on, according to the principle we have seen in the modern system, into phrase-signs for all the common groups of words, long words, or common stems with ordinary endings.³

¹ Vide p. 240 (i) *supra*.

² e.g.  vitam, but  viam.

³  dominus  domine  dominum

 domini  domino, which in an ordinary context could be safely written



or variants made by



or by the simple undulating line in different positions. It must be remembered that our authorities for 'Tironian' are chiefly writings in book-form, not reporting notes.

This is the only one of the three of whose practicability we have positive assurance¹ and ocular demonstration.² Is it possible to suppose that the Greeks never developed a system equally serviceable? Is it not more reasonable to hold with several writers that the Romans borrowed through Cicero and others *utriusque linguae docti* a current Greek system, as has been shown³ from the distinct traces⁴ of Greek forms in the Roman system? But whether the existence of the *notae Tironianae* proves the existence of an equally developed Greek system, a system which has, Wessely says, once flourished though it has perished leaving few traces, or whether, as some older writers on Tironian outlines maintained, the Tironian is the offspring of native Roman ingenuity, it is equally impossible to believe that the Greeks developed no system of their own. For brief as is the Tironian as we have it in its mediaeval dress, there is good ground for supposing that it was briefer in Roman times: the fuller terminations were probably added at a later date, further removed from the times of the earliest *sigla*-writing, when the daily practice of writing a living language made the more contracted forms more easily intelligible.

O. Lehmann, whose dissertation (Leipzig 1869) '*Quaestiones de notis Tironis et Senecae*' is one of the most suggestive and authoritative contributions on the subject, has one striking conjecture, concerning the history of the *punctum* (common to both Latin and Greek tachygraphic remains and usually explained as diacritical). It is that it was originally the *vowel* sign (cp. 'Pitman's' system), but that, when the corruptions of the Middle Ages introduced the fuller word-endings, the *punctum* was set free, and its nature not being well understood it was allowed to remain, sometimes useful as the diacritic dot, and sometimes *otiose*. These corruptions, that retention of meaningless signs may have had their parallel in the history of Greek tachygraphy, and have led to a 'clean sweep' succeeded by the New Tachygraphy of Grottaferrata, a lifeless imitation of a once working system.

Having before us the full 'Tironian' system, the highly developed modern systems, such as English 'phonography,' the epigraphic *sigla*, the ligatures and abbreviations of palaeography, as exhibiting the combined out-working of the laws of psychology, philology and *Lautphysiologie*, it is not difficult to establish the normal course of development of any system of brief writing.

The beginning is made by reducing the complexity of written symbols;

¹ See Ausonius Epigr. 146. 74, which at the least makes it impossible to regard Roman shorthand-writing as anything but rapid reporting. Cp. *tu sensa nostri pectoris vix dicta iam ceris tenes*.

² The reader must regard the strangely laboured squareness of the free ends of strokes, like those of modern capitals (I, N) which are to be seen in 'Book' Tironian (e.g. *Das Tiron. Psalterium*, Lehmann 1885) as being ornamental additions introduced by scribes in making fine

copies. They add nothing to the significance of the signs.

³ Cp. Gardthausen art. on Greek Tachygr. in *Hermes*, vol. xi, 1876; Götzbauer, *D. dr. S.* cap. vi. et ceteri.

⁴ Viz. $\Delta = D$ $\angle = G$ $\nabla = N$ $\alpha = O$
 $\tau = P$ $\rho = R$ $\cup = ov = V$ $\zeta = (S) = Z$. Cp. Götzbauer, *Die drei Syst.* p. 19 et seqq.

but the simpler outlines thus gained are found to be inadequate to the demands of thought or of spoken language. The latter is carried on not in syllables but in phrases. Who could scan Plautus or Aristophanes giving an equal time value to every syllable, or even to all words of the same length? Speech refuses to be divided in that way; even prose, the commonest prose of daily life, goes with a certain rhythm, which throws into prominence some of the members of a phrase, and the rest into a subordinate place, or disposes of them by an ellipsis, or even an ecthlipsis. And writing, approximating itself to the thought or speech, must take the same course. First the word and then the phrase submits to the pressure of necessity: the characteristic portion is written in a fixed form and the rest subordinated or omitted: *e.g.* in 'Tironian' $3^{\bar{r}} = B^{us} = beatus$, $I^{\bar{e}} = in\ consilio$; in the MSS. $\tilde{\tau} = \tau\acute{o}\upsilon\tau\omicron\upsilon$ $\pi\acute{\iota}\tilde{\tau} = \acute{\alpha}\nu\tau\alpha\varsigma$ $\pi\tilde{\sigma}\kappa = \pi\alpha\rho\alpha\sigma\kappa$ $\pi\rho\omega\tilde{\tau}\hat{\mu}\tilde{\gamma} = \pi\rho\acute{o}\tau\omega\nu\ \mu\eta\nu$ γὰρ (frag. math. Bob.); while in the Inscriptions the *sigla* exhibit the same tendency, as in MARCUSF; and the graffiti no less, *e.g.* AED.OFSCR.ISSUS. An interesting example is in the life-history¹ of the 'sign of the fish' well-known to Christian epigraphy. The long strings of *sigla* which constant association in the same formulas rendered sufficient, exhibit the highest attainment perhaps possible to them; for such formulas, though in this use calculated to save labour in stone-cutting, would obviously be most serviceable in rapid writing, and were probably borrowings from or imitations of a system of reporting speeches by *sigla* which may have prevailed in very early historic times. Numerical representation is a separate, but significant species of shorthand: 10,662 is written as fast as speech, while even the equivalent M[□]H[□]Δ[□] is briefer than the full syllabic writing of the words at least.

The development of minuscule abbreviation may be seen in such MSS. as the Bibl. Angelica MS. B, 3, 11 (Pal. Soc. ii. 85) and those reproduced by Wattenbach (*Scripturæ Græcæ Specimina* Tab. xxiii., the Etym. Magn. Cod. Laur. and Tab. xxiv. cant. cantic. Ambros. A, 158) which contain lines such as


OR

and much of the same character in somewhat earlier MSS.

Contracting thus by 'rule of thumb' the copyists of MSS. would hardly go far in the adoption of conventional phrase-symbols; but a systematic

¹ Accepting the current account, we get a true tachygraphical development (in spirit, though

the manner is perhaps grotesque) thus:

$\left\{ \begin{array}{l} \text{Ιησους} \\ \text{Χριστος} \\ \text{Θεου} \\ \text{Υιος} \\ \text{Σωτηρ} \end{array} \right.$	$\left\{ \begin{array}{l} \text{I} \\ \text{X} \\ \text{O} \\ \text{Y} \\ \text{Σ} \end{array} \right.$	\rightarrow	\odot	\rightarrow	$i\chi\theta\acute{\upsilon}s \rightarrow$	
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stenography certainly would do so; the 'Tironian' did so though sparingly, at least in the book-style (Lehmann *loc. cit.*). But of one principle in the word-building we might be certain, even without the positive example of the 'Tironian,' that the words of a synthetic language like Latin or Greek, related both in meaning and in sound, as for instance the cases of a noun, or the persons of the same tense of a verb, would be kept as much as possible alike in writing.¹ The schoolboy in writing out his declensions reduces the labour of his pen on such a principle. English shorthand, which has to do with an analytic language, has less need of it, but the 'Tironian' develops it very fully: dominus²-e-um-i-o and similarly cum, ei, eo, eos differ only in the distinguishing syllable, even in 'book' shorthand; and this principle would enable the outline of a common word to be safely shortened still more. I have frequently in my own shorthand notes found that on commencing a subject, or writing notes from an author in Latin, French, or English, involving some special vocabulary, I could without risk of confusion adopt for the time being an extremely brief sign for each of the technical words and phrases most frequently recurring, and yet that on subsequent reading, even long after, the special meanings associated themselves quite naturally with the context. Mathematicians and chemists have systematised their own symbols in exactly the same way; a proposition in Euclid can by the use of the common symbols be written down as fast as it can be demonstrated and transcribed as readily into the fuller form. Who is there in fact who is required to write daily the stereotyped sets of words which every business, every profession, every scientific pursuit, must employ, who does not unconsciously invent for himself a shorthand of his own, if none exist already? Any system of tachygraphy may begin in self-consciousness and with a complete set of syllabic signs, but it can no more prevent itself from taking such a direction as this, than could the epigraphic capitals from giving place to uncials in rapid writing, or uncials to the cursive hands.

I have only to gather up the threads of my argument. There did exist in post-classical, and accepting a reasonable hypothesis, also in classical times, a Greek tachygraphy. Its invention was thus, probably, anterior to that of the Roman system, which, with the accretions and corruptions of the Middle Ages, has descended to us as the '*notae Tironianae*'; and there are grounds for the belief that the original Roman system was directly derived from the hypothetical oldest Greek system. The latter was, probably, an earlier phase of the oldest tachygraphy known to us, and probability is directly against the assumption that it could have been either purely rectilinear, or syllabic. The oldest remains reveal a system, written by geometrical outlines, or skeletons, of words or phrases, with smaller signs for the subordinate members; but no continuous passages of this period (down to the 8th century) have yet been convincingly deciphered, so that it is impossible yet to decide whether

¹ Cp. n. 3 p. 261 *supra*.

² *Vide* p. 261 *supra*.

the development of any old Greek tachygraphic system was raised to a stage as practicable as modern systems, though there are strong reasons for inferring that it was carried as far as that of the 'Tironian.' The normal course of such development is through progressively compendious outlines, the simplification of word- and phrase-signs increasing with the increasing significance of the groupings, so that the original elements appear with new and complex meanings. This principle is seen at work in 'Tironian' and in modern systems, as well as in the contractions in the MSS, although working upon elements of different kinds. In the case of old Greek tachygraphy we are now in possession of the elements—the alphabet and a part of the syllabary; but we have no clue yet to the particular method in which abbreviation was developed. For that we must wait perhaps until there are more specimens of the full writing than have yet been recovered, or until tachygraphy shall find its own Rosetta stone!¹

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¹ The comparison (Wessely, *Ein Sys.* p. 3) of the finding of the Acropolis-fragment of 1884 with the discovery of Sanskrit seems to me a most exaggerated estimate of its value, even with reference to the service of each to its appropriate branch of learning.

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THE DOUBLE AXE AND THE LABYRINTH.

IN the paper on 'Mycenae Tree and Pillar Worship,' (above, pp. 99 foll.) and in the various discussions of the Cretan discoveries, several theories and interpretations are put forth which have been too hastily accepted.¹ I do not propose to deal with the whole question here, but to call attention to the fact that a great part of the evidence has been overlooked. It is not unnatural that, in the enthusiasm of a great discovery, the happy discoverer should be taken by an interpretation which is ingenious and in many respects alluring, since it offers a key to mysteries long unexplained. Nevertheless there are other facts to be reckoned with.

The theories I refer to are these: (1) that the double axes carved in the Cnossian palace have a religious significance; (2) that they are the symbol of Zeus; (3) that the pillar upon which several of these signs are carved was worshipped; (4) that the Labyrinth derives its name from the word *λάβρυς* the Carian name for an axe of this kind, and (5) that the palace of Cnossos was the Labyrinth, which means the House of the Double Axe. These theories are supported by the following evidence: (1) that the statue of Zeus at Labranda in Caria was described as holding in his hand a double axe, the local name for which was *λάβρυς* (Plutarch, *Quaest. Gr.* 45); (2) that double axes of bronze were found in the Dictaeon Cave, where Zeus was worshipped; (3) Mr. Evans also collects a large number of facts to illustrate the worship of pillars, and apparently of axes also.

Before adducing the evidence which I think is fatal to the whole series of theories as applied to the Cnossian palace, I wish to say a word on the question of divine symbols. It is unfortunate that 'symbol' is sometimes used loosely in English, to mean either an attribute, that is an accidental mark, or something which, when alone, can be treated as equivalent to that which it symbolises, or as embodying its essence. Seeing that we shall have to consider whether or not the axe was a symbol in the true sense, I prefer to use the word attribute in the meanwhile, not to beg the question. Incidentally I note that in 'Pillar Worship' the point at issue is frequently assumed in such phrases as 'divine axe,' 'symbol of Zeus,' and so forth. Now we know that in the classical types of divinities certain attributes commonly occur: Zeus holds a thunderbolt, Apollo a lyre, Poseidon a trident, Hermes a caduceus, Athena spear and shield. On the other hand, these gods are often represented without attributes. Many statues called Apollo have not so

¹ They are accepted in full, and stated as if proven facts, by Mr. Hall in his new book, *The Oldest Civilisation of Greece*.

much as a stitch upon them; the Hermes of Praxiteles has no caduceus; Athena is often not armed, Aphrodite is. How unnecessary the attributes were to the conception of the deity, is clear from the votive statuettes discovered in many places. On the acropolis of Athens, the goddess appears hundreds of times as a figure seated or standing without attributes, often again with shield and without spear, holding a fruit, a bird, or what not.¹ The statuettes of Demeter found at Eleusis might often quite as well be Athena. The same vagueness is seen in Tegea, where the discoverers hesitate between Demeter and Athena.² So too with the heroes, ancestor-spirits, who appear to have been worshipped by the rural population of Greece at the earliest period, and may turn out to have been the Mycenæan gods: they have their lance or sword, and their horse, but there is no uniformity of treatment; no Phœdrias fixed their type for ever. The attributes of heroes and gods are things of every day: arms and armour, dress, a bunch of grapes, a corn-bundle, a hat and boots, a musical instrument, a tool. The armed god or hero represents the divine protector in his strength; Demeter and her sheaf, the deity in her beneficent aspect; Poseidon, the fisherman, who speared his prey with a trident as in the Aegean he does to this day, with a reminiscence perhaps of the goad.³ The Greeks would be as likely to worship a trident or a bunch of grapes as to worship a pair of top boots; and to regard these things as symbolically sacred would be to worship them. Savages may make a fetish of a collar-stud or a knife, but there is no reason to doubt that such exaggerated superstition was alien to the Greek intellect.⁴ Isolated indications of the ruder superstition cannot outweigh the general tendency of Greek worship towards sanity and away from symbolism. Among these attributes the single exception is the thunderbolt of Zeus. There seems to be little doubt that the Greeks of the classical age believed that what he held in his hand was the thunderbolt. It is possible that the original type held in his hand a double three-pronged or two-pronged dagger, with a grip in the middle; but I do not insist on this now. It is natural that Zeus, who was certainly the Thundering God, should hold the thunder; but a figure holding a war-weapon might convey the idea of the Thundering-God, as Thor does with his hammer; and this is the explanation which I suggest of Carian Zeus with the double axe. There is nothing holy or even recondite about this kind of axe. It is the war-weapon of the Amazons, who hold it in their pictures; it is held by the local heroes in Asia Minor, in place of the sword or spear of the Dioscuri;⁵ also by Apollo himself in the same region;⁶ it was used to slaughter the sacrificial victim by the Hittites⁷ and at Pagasæ;⁸ it was dedicated as war-spoil.⁹ The type is descended from two-headed axes of the stone age, which are common enough, through a

¹ *Arch. Anz.* viii, 140 ff.

² *Mith. d. d. Inst. Ath.* iv. 170 ff.

³ If proof is asked of the use of tridents in fishing, see the sixth book of the Anthology (30, 38): and the express statement of Eudocia, p. 571 (Teubner).

⁴ There are, however, a few traces of the superstitious worship of thunderstones; see

below.

⁵ *Mith. d. d. Inst. Ath.* x. 12 altar, θεοῖς ὁσίοις καὶ δυνάτοισι Bull. d. Corr. Hell. iv. 294, θεῶν σάκροντι εὐχῆν.

⁶ *Cat. of Berlin Sculpt.* 680.

⁷ Perrot and Chipiez, *Hist. de l'Art*, iv. 637.

⁸ Ridgeway, *Early Age of Greece*, i. 270.

⁹ Plut. *Quæst. Gr.* 45.

copper intermediary.¹ Moreover, it has no special connexion with Zeus: it appears in the hands of Dionysus or one of his train;² it was dedicated to Apollo as spoil of war in Delphi,³ and to Artemis at Lusoi in Arcadia,⁴ and is carved on an altar from Coloë which was dedicated to Apollo Tarsis.⁵ A female figure, explained as a priestess in a sacred place, holds one in each hand, as figured on a metal belt lately found in Crete.⁶ Finally, it appears on the coins of Pherae,⁷ and of Tenedos, where no Zeus has ever been heard of, and double axes of gold were found at Mycenae. It was therefore an article of everyday use, in peace, ritual, or war; and its occurrence on altars dedicated to Zeus Labrandeus⁸ need not signify anything more than it appears to do on the altar dedicated to Apollo,⁵ where it seems to commemorate the sacrifice of an ox. Even if this be denied, all these altars are late and show late Asiatic influence, so that no argument can be drawn from them for the early Greeks or Mycenaean. In drawing out this comparison, I would add, that all the dedications mentioned fall in the post-Mycenaean period; and so do those in the cave of Dictæ according to the explorer's estimate.

It will now easily be understood that the Greeks would not be likely to regard attributes held by deities as sacred, or to worship them. It is easy to say that axes here or wine-bowls there, represented on coins, are symbolic and sacred; but that has never been proved, nor has it been proved that these things were ever worshipped by the early Greeks.⁹ No trident-worship is recorded, no reverence or sacrifice paid to the sword or the spear, the caduceus, the wine-jar, the torch, the hammer, or Hermes' wide-awake hat as symbols of the deities who use them.¹⁰ If this were likely in any case, it would be likely for the thunderbolt, which was not commonly used by warriors of the earth; yet there is nothing of the sort but the superstitious regard for meteoric stones and the like, which are often worshipped by savages, and which the Greeks no doubt regarded as things of mysterious origin and power, without reference to the attributes of any deity. If a Zeus Keraunos is found in Arcadia,¹¹ there are inscriptions to Athena Hygieia at Athens; it is the deity who is worshipped in each case, and the noun added

¹ Cp. Ridgeway, *Early Age*, i. 51.

² Stephani, *Compte-Rendu* 1863, p. 128 ff. (quoted by Frazer).

³ Plut. *l.c.*

⁴ *Jahreshefte des ost. arch. Inst. in Wien*, iv. 59.

⁵ *Arch. Zeit.* 28 p. 38, *Cat. Berl. Sc.* 681: ἀνθέστῃσαι οἱ Ἀπρέμωτος ὑπὸ τὸ κατηχθὲν στηλλάριον ὑπὸ τοῦ βοῦς Ἀπόλλωνι Ταρσῶ. So at Eleusis, in the same late age, are carved torches crossed, sheaf of corn, cista, and basket, along with a large rosette.

⁶ *Εφ. Ἀρχ.* 1900. 37.

⁷ Mr. G. F. Hill has called my attention to these: *Brit. Mus. Cat. Troas, &c.*, p. xlvii. Head, *Hist. Num.* 261. The schol. on *Il.* xxiv. 428, mentions that Dionysus was called Πέλεκος at Pagasae: 'from the sacrificial axe used in sacrificing to him' (Head). This is not a con-

vincing explanation, but I am not prepared with a better without knowing more of the cult.

⁸ *Myth. d. d. Inst. Ath.* xv. 259.

⁹ A more rational suggestion is that worked out by Ridgeway, *Origin of Currency*, 317 ff.: that the coin represented a unit of barter in kind.

¹⁰ Prof. E. A. Gardner in *J.H.S.* xvii. 305 quotes a schol. to the *Iliad* who describes how Caeneus set up an ἀκόντιον in the agora and bade the people count it a god. Whether Prof. Gardner is right or not in regarding this as the may-pole, it is clear that the object was not a symbol of a deity who bore the spear.

¹¹ Διὸς Κεραυνῶ, Farnell, *Cults* p. 149, Collitz, *Gr. Dialektinschr.*, i. 1197. This I suggest is equivalent to Zeus Bronton, *e.g.* B.C.H. xx. 117; but if any prefer to regard it as genuine fetish-worship, this proves nothing for the axe.

is merely a differentiation. If, in the Hellenistic age, divine honours were shown in Asia Minor to the thunderbolt,¹ what does that prove for Greece or Crete a thousand years before? It well suits a place and period which could worship such monstrosities as *Ζεὺς Ὀσογῶς Ζηνοποσειδῶν*.²

I turn now to the second piece of evidence: the dedication of axes in the cave of Zeus, which are supposed to have been there dedicated because they were symbols of Zeus. If they stood alone this could not be assumed, because there is no recorded instance of the dedication of a divine attribute to a deity because it was his attribute. I can speak with confidence, because it so happens I have been for some years collecting and classifying votive offerings, and I set out with the expectation of finding many such; I thought then that these attributes must have something holy about them, mislaid no doubt like others by the analogy of the Cross. But amongst many thousands of dedications, collected from all sources, I have found not a single one. Spears, helmets, and shields are dedicated to Athena, but only because they are articles of use or spoil of war; wine may be offered to Dionysus, and corn to Demeter, but as tithe or first fruit; and the offerings are not confined to one particular deity. No thunderbolts are dedicated at all and no caduceus.³ Axes were dedicated to Apollo, as I have shown, as war-spoil. An axe is dedicated to Hera by a butcher, as tithe of his profits, which can only mean that the axe was offered as an article of value.⁴ So Tenedos paid an offering at Delphi in axes, as we should expect.⁵ For the same reason, no doubt, they were offered in Crete. Some of the Cretan axes, like those found at Olympia and in Arcadia, are in miniature. These may have been toys, which were frequently dedicated; or they may have represented a

¹ Appian, Syr. 58.

² *Mith. d. d. Inst. Ath.* xv. 260.

³ I do not imply that meteoric stones were not consecrated in temples. If they were, the principle was that anything strange or rare was fit for consecration. But if they had been offered as symbols, they would have been offered to Zeus only. There is the stone of Cronos at Delphi, not a thunderbolt; but an egg-shaped stone is dedicated to Aphrodite in Gaul (Rohlf. *I.G.A.* 551); a conical stone, not a thunderbolt, in Corcyra (*Ath. Mith.* xix. 340); a χρυσῆς λίθος at Athens to Athena (C.I.A. ii. 676. 9). The loomless stones called Love at Thespieae (Paus. ix. 27. 1) and Diana at Ephesus if thunderbolts were not dedicated to Zeus.

⁴ Rohlf. *I.G.A.* 543 τὰς ἡρας ἱερὸς εἶμι τὰς ἐν πεδίῳ. *Φυλάκος με ἀνέθηκε ὕρταμος Φέρων δεκάταν* (archaic).

This is really additional evidence to the truth of Ridgeway's explanation of the axe of Tenedos. A butcher does not make axes; nor were axes sacred to Hera; the offering was a tithe of his profits. Therefore this butcher dedicated this axe as representing the value of his tithe or part of it. It does not prove that

the axe was a unit of currency; but as cumulative evidence it is something. Axes are still used as currency in Africa, instead of money; in Cyprus the 'silver axe' appears as a unit of exchange: Collitz, *Gr. Dial. Inschr.* i. 60 etc. I should add, that Mr Hill kindly refers me to coins of Tenedos which show an axe supported on a base; on another, a wine-jar is tied to it by a fillet (*Zeitsch. f. Num.* xx. 274). The fillet I endeavour to explain below. To poise an axe on a base is not to make it a sacred symbol. Votive offerings of all sorts were so placed: vases, tripods, torches, ceremonial headdress, carvings in relief. These are dedicated, but are not sacred symbols; therefore the base cannot prove that anything is a sacred symbol.

⁵ Plut. *De Pyth. Or.* 12: for a catch of crabs. Plutarch's own explanation is that the axe was chosen because the pattern on the crabs' back resembled the axe. 'Those who wish may believe this; but in Plutarch's day all the meaning of votive offerings had been lost. At all events there is no Zeus in this axe; and the axe of Tenedos had the same shape as the Carian labrys.

fraction of the axe-unit in value. Such is the use of miniature double axes in Mexico.¹ Miniature axes have been found in tombs at Hallstatt² along with other valuables.

I shall return to the cave of Dictæ anon: but first a few words about the pillars. It is not easy to believe that the *bactylus*, whether *lingam* or meteorite, could have developed into a structural part of an edifice; and it does seem to me that the pillars depicted by Mr. Evans are more likely to have been meant simply to support the roof (*c.g.* Figs. 61, 66). But granting their sanctity for the sake of argument, what does it prove for a square pillar? And is it not rather far fetched to suggest, by the epithet 'pillar-like,' that the handles of the axes on p. 109 were sacred because of their resemblance to a pillar? It reminds one of Cleon's oracle, which was so satisfactorily interpreted by Demosthenes:

ὁ δράκων γάρ ἐστι μακρόν ὃ τ' ἀλλᾶς αὖ μακρόν.

All the evidence, then, vanishes on examination; and it would be easy to point out other assumptions which need proof, but no proof is given. What proof is there that Zeus Labrandeus was so named because he had a *labrys*? Plutarch's opinion on etymological points does not go for much. Labrandeus can only be derived from Labranda, the place of his worship. The town indeed may have been named from the axe; but if I am told this makes the axe sacred, I ask whether celery was sacred because Selinus was named from it.³ Very likely axe-making was the trade of Labranda, as sword-making was once of Damascus. Again, what proof is there of any connexion between the Cretan and Carian worship? Caria only comes late under Mycenaean influence, and certainly was not the source of it. What proof is there that Chossos worshipped Zeus at all? Zeus was no doubt post-Mycenaean there as he was at Olympia. If Mr. Evans' chronology is right, and I do not question it, Chossos was destroyed five hundred years before we hear of a Zeus in Crete, and when he arrived Zeus no doubt took over the Cave with the other fixtures, as Apollo did at Delphi. To cap all, Mr. Evans has just found another fresco, which depicts a shrine, the roof supported by 'sacred pillars' (why sacred?), and containing no Zeus and no double axe, but a female divinity.⁴ Further, why must the axe be regarded as a sacred symbol whenever it appears on a vase, whether upright and tied with string, or the head alone, and not equally the head of the sacrificial ox, or indeed the cuttlefish and the lotus? Is there no such thing as a decorative motive? The string or fillet serves to connect the offering with the god: so in the case of Cylon's conspiracy, the conspirators who took refuge in the shrine fastened themselves by a thread to the statue of Athena, but it has never been maintained that they were sacred symbols on that ground.⁵

¹ Ridgeway, *Early Age*, p. 413.

² *Op. cit.* p. 420.

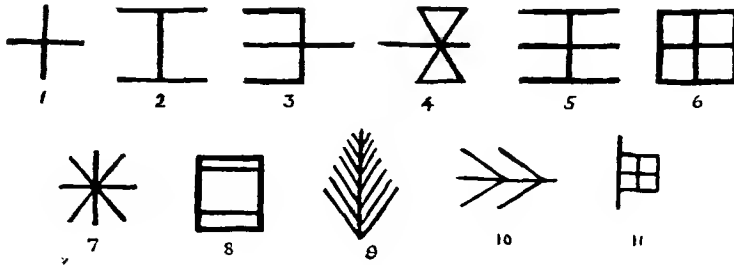
³ That Selinus was so named because celery growing was a staple industry, is proved by the fact that as Metapontium and Heraclea sent a


golden sheaf of corn to Delphi, so Selinus sent golden celery as a tithe: Plut. *De Pyth. Or.* 12.

⁴ Letter to the *Times*.

⁵ Plutarch, *Solon*, 12. So in other cases: Herod. i. 26. Thuc. iii. 104.

Having shown, as I hope, the essential weakness of the theories, I now proceed to the most serious argument of all: namely, that they neglect the greater part of the evidence. To read the paper, one would imagine that the palace at Cnossos was full of double axes, and nothing else; as a matter of fact, there are in the corridor and adjoining chambers no less than eleven different signs:



These are engraved in different positions, not only nor chiefly on 'corner stones,' but without rule or regularity. They come together in groups: thus we find the first seven all close together, 11 + 7 on one slab, 6 + 7 + 4 on another, 11 + 11 on another, thus  and so forth. In the

corridor and store-chambers axes occur seven times, other signs twenty-nine times. Are all these divine symbols? Is No. 3 the Cretan Poseidon, No. 7 the star of the Cretan Dioseuri, No. 9 the thyrsus of the Cretan Dionysus? It is not legitimate to pick out one of those symbols, even if it occurs a dozen times on one pillar, and explain it by a theory which takes no account of the rest, especially as they are arranged precisely as they would be arranged if they were letters or literary signs. Moreover, there is Phaistos to reckon with. There last summer another palace was unearthed, exactly similar to this of Cnossos, with corridor-chambers, courtyard, and gate, and with similar signs engrievd upon the blocks. This is not explained as another Labyrinth or House of the Double Axe; but what are the axes and tridents and so forth doing there? Finally, nearly all these signs occur on the gems which have already been found, and have been interpreted by Mr. Evans already as literary signs; they may be seen on the tables given in vol. xvii. p. 384-6 of this *Journal*; and some at least, including the double axe—perhaps all, I have not access to the documents—occur on the inscribed tablets found at Cnossos.¹ It is even possible that all these signs were covered up with plaster when the place was inhabited; one, in the bath, is seen just emerging from behind a coat of it.

So also with the cave finds. The nineteen axes form but a small fraction of the whole number of articles found: besides these were here found 20 lance-heads, 25 darts, 160 knives, with pins and tweezers, a car drawn by oxen, animals, human figures in bronze and lead, draughtmen or something of the sort, and

¹ Nos. 8, and probably 2 and 3, may be seen on the Plate, *Annual Brit. Sch. Ath.* vi. Plate II.

earthenware vases. There is no more reason for holding that the axes were dedicated as the symbol of Zeus, than for calling the lance-heads symbolic of Ares, or the hairpins of Aphrodite. All these offerings can be paralleled elsewhere, and fall into well-defined classes: and the axes belong to the class of things useful or valuable, the smaller ones may be models or toys or fractions of the unit of value. All these were dedicated, and in that sense sacred: but there was not one sanctity of the knife, and another of the lance, neither did axe-head differ from hairpin in holiness.

It is clear, then, that whatever any one may think about the sanctity of the things which deities hold in their hands, or are clothed in, that idea cannot be brought in to explain the axes carved in the palaces of Cnossos and Phaistos, nor those dedicated in the Dictæan cave. I wish to lay stress on this, because I am aware that the sanctity of symbols is believed in by many scholars; but if (*absit omen*) the whole of my argument on that head were proved to be wrong by the discovery of a battalion of new authorities, such a disaster would not make it lawful to isolate and sanctify the axes of the Dictæan cave, or those of the Cnossian pillar. With that falls the whole argument in a heap. No one would have dreamt of canonizing that particular pillar but for the significance attached to the axes carved upon it; no doubt it would have been regarded, like that exactly similar one which at Phaistos stands in the store-corridor, without signs, as having served the humble if necessary purpose of supporting a roof. But for these signs, the suggestion of Mayer that Labyrinth comes from *labrys* would have been allowed to rest in its obscurity. All ancient authorities agree that the Labyrinth was a kind of maze; and the palaces of Crete are the very last thing one would describe as a maze. The visitor doubtless would be impressed with fine open courtyards and straight corridors; for the rest, any house looks confusing when the walls are just beginning to rise, and the place in its present condition looks like a collection of cellars. If the Labyrinth must be identified, better dub with this name that series of tortuous caverns, like the 'Labyrinth' at Gortyn, which exists three miles above Cnossos in the hill, but is now closed by a landslide.¹ There is nothing to suggest *labrys* in the legendary labyrinth, except the sound of the name. No attempt is made to analyse the word Labyrinth, to explain the ending, to justify the metathesis of *v* which is unexampled. On the same principle Fluellen undertook to prove that Alexander the Great was a Welshman: there is a river in Monmouth, and there is a river, look you, in Macedon also. Crete has yet ninety-eight cities left to explore; it is too soon to explain everything.

W. H. D. ROUSE.

¹ Spnatt, *Crete*, i. 66. Strabo calls a catacomb near Nampia 'labyrinth,' viii. 369. In one legend the Minotaur is represented as hav-

ing found a cave in the mountains, in which he had his lair (Eudocia, 253).

GREEK INSCRIPTIONS FROM EGYPT.

THE inscriptions here published are for the most part in the Ghizeh Museum, where I copied them last year when assisting in the preparation of the catalogue of the Graeco-Roman rooms. They do not appear to have been edited previously, and offer some points of interest. The numbers given are those of the new catalogue.

I.—GHIZEH MUSEUM, No. 9288.

ΔΙΑΜΟΝΗΣ ΤΟΥ ΚΥΡΙΟΥ
 ΗΜΩΝ ΑΥΤΟΚΡΑΤΟΡΟΣ
 ΚΑΙΣΑΡΟΣ ΜΑΡΚΟΥ ΑΥΓΟΥΣΤΟΥ
 ΑΝΤΩΝΙΟΥ
 ΣΕΒΑΣΤΟΥ ΕΥΣΕΒΙΟΥ
 ΣΥΝ ΠΑΝΤΟΣ ΑΥΤΟΥ
 ΝΕΜΕΣΙΑΝΟΥ
 ΚΑΙ ΑΛΘΑΙΕΥΣ
 ΓΥΜΝΑΣΙΑΡΧΟΣ ΤΗΣ ΣΟΙΤΩΝ ΠΟΛΕΩΣ
 ΑΝΕΘΗΚΑ ΤΟΝ ΑΝΔΡΙΑΝΤΑ ΤΟΥ ΠΟΛΙΤΕΩΣ
 ΣΑΡΑΠΙΔΟΣ ΕΠΙΔΟΥΣ ΕΙΣ ΤΟΥΤΟ ΜΕΤΑ
 ΕΞ ΕΘΟΥΣ ΔΙΔΟΜΕΝΟΝ ΚΑΙ ΤΟΝ
 ΑΝΑΛΩΘΕΝ ΔΑΠΑΝΗΜΑΤΟΣ
 ΕΠΙ ΤΡΑΤΗΓΟΥΝΤΟΣ ΑΡΤΕΜΙΔΩΡΟΥ
 ΕΤΟΥΣ ΚΑ' ΕΠΕΙΦ'

[Τπέρ] σφτηρίας [καὶ] | διαμονῆς τοῦ κυρίου | ἡμῶν Αὐτοκράτ[ορ]ος |
 Καίσαρος Μάρκου Αὐ[ρη]λίου | [Κομμόδου] Ἀντ[ωνί]ου | Σεβαστοῦ Εὐσε-
 βίου [καὶ] τοῦ | σύνπαντος αὐτο[ῦ] ρίκου, | Νεμεσιανὸς Ἀρείου τοῦ
 Π[.....] | Σώσικοςμιος ὁ καὶ Ἀλθαιεύς [ἐπαρχος] | γυμνασίαρχος τῆς
 Σοιτῶν πόλεως | ἀνέθηκα τὸν ἀνδριάντα τοῦ Πολίτεως | Σαράπιδος, ἐπιδούς
 εἰς τοῦτο μετὰ τὸ | ἐξ ἔθους διδόμενον καὶ τὸ λοιπ[όν] | ἀναλωθέν δαπάνημα
 ἐκ φιλοτιμίας, | ἐπὶ [.....] ρίνου ἐπάρχου Αἰγύπτου, | ἐπιστρατη-
 γοῦντος Αὐρηλίου Ἰάσονος, | στρατηγοῦντος Ἀρτεμιδώρου | ἔτους κα'
 Ἐπεῖφ'.

The inscription is on a columnar statue-base of limestone 88 metres high and 53 in diameter, one side having been cut flat to receive it; the remainder

of the surface is decorated with acanthus leaves. The letters are, in the first seven lines, '026--031 high: in the rest, '015--02. Date: 181, June 25th.

The stone was seen by Dr. Petrie about 1886 lying at Sakha (Xois), where he copied it, and appears to have been removed to the Museum three or four years ago. It is quoted by S. de Ricci in *Proc. Soc. Bibl. Arch.* 1900, vol. xxii. p. 381.

The name of Commodus has been deliberately erased in l. 5, every vestige of the letters being cut away. A similar erasure has taken place of the name of the prefect in l. 15, but the work has been much less thoroughly done there, by merely digging a line through the letters. The traces which remain are, however, insufficient to make the restoration of the name possible. The nearest in date of the known prefects is Flavius Pris[cus], mentioned in a Berlin papyrus of the year 181/2¹: but his name will not suit.

The most interesting point in the inscription is the addition of the epithet Polieus to the name of Sarapis. So far as I know, this is a unique instance of any distinctive cult-title being given to him, apart from epithets used in poetry, and forms an exception to the general character of the worship of Sarapis in Egypt. There was a curious difference in the development of the religious conceptions of the three gods who were associated to form the local triad of Alexandria—Sarapis, Isis, and Harpokrates. They were originally the deities of the Egyptian village of Rhakotis, which stood on part of the site chosen by Alexander for his new foundation, and were, so to speak, taken over as part of the property. The fusion of Greek and Egyptian elements, which took place far more completely at Alexandria than elsewhere in Egypt, was naturally shown in the local worship: and, as the influence of the new capital spread over the country, it carried with it the supremacy of its gods; just as had been the case with the various capitals of the earlier dynasties and their particular cults. But, in spite of Greek influences, Isis remained practically Egyptian: her statues were always of Egyptian type, with Egyptian dress, and her temple at Alexandria was of Egyptian style.² To Herodotus, Isis was represented as Demeter³: but this identification does not appear to have influenced later conceptions of her: she was never equated with any other goddess, but constantly localised by a distinctive epithet. Thus, at Alexandria she was worshipped as Isis Pharia,⁴ Isis Plousia,⁵ and Isis Sothis:⁶ in the Fayum, she was variously known as Isis Neferses,⁷ Isis Nefremmis,⁸ Isis Sononais,⁹ and Isis Nanaia¹⁰: at Memphis, Isis of Malalis is mentioned¹¹: at Akoris, Isis Mochias¹²: at Pathyris, Isis Pathyra¹³: at Koptos, she was *η*

¹ B.G.U. 12.

² *British Museum Cat. Coins, 'Alexandria,'* 540, 879.

³ Hdt. ii. 59.

⁴ *C.I.G.* iii. 4941b.

⁵ *Ἀθήναιον* iii. 87.

⁶ *B.M. Cat. Coins*, 1121.

⁷ B.G.U. 1.

⁸ Pap. B.M. 353.

⁹ *Hermuthena* xxi. 243.

¹⁰ Pap. B.M. 345.

¹¹ *J.H.S.* xii. 384.

¹² *C.I.G.* iii. 4703c.

¹³ *Rec. Trav.* x. 140.

τοῦ χώματος θεά¹: a graffito from a quarry opposite Gebelên gives the title Isis Resakemis²: at Hieria Sykaminos she was addressed as Rhodosternos³: and at Philae, the greatest centre of her worship, she was fitly known as Isis Myrionymos.⁴

The Greek treatment of Harpocrates was essentially different from that of Isis: he never had distinctive epithets, but was represented by distinctive types. Thus on Alexandrian coins, the forms which appear to belong to him, rather than to Horus, are the Alexandrian, as a child: as Harpocrates of Herakleopolis Magna,—where he was identified, through the local deity Harshesf, with Herakles,—carrying a club: as Harpocrates of Mendes, a bearded man: as Harpocrates of Pelusium, a youth with a pomegranate: as Harpocrates of Canopus, a figure half man, half crocodile: and as Harpocrates of Buto, a child on a lotus.⁵

Sarapis, on the other hand, as has been already remarked, never, except in this inscription, appears with a distinctive epithet; and the type under which he is represented is always the same—that of the great statue, reported to be the work of Bryaxis, and to have been originally intended as a figure of Hades, which was brought from Sinope by Ptolemy I. or II. and set up at Alexandria.⁶ The special feature in the development of his worship was the way in which, instead of being locally specialised, it absorbed other local cults. The name of Sarapis was derived from the Osirian form of Apis—and the Osirian connection with the lower world justified the adoption of the Hades statue. But at Alexandria the attributes of Apis dropped out of the popular ideas, though preserved in priestly traditions, as is shown by the dedication of a statue of a bull to Sarapis in the reign of Hadrian.⁷ It was, however, probably in virtue of the Apis connection that Sarapis was installed in the great temple of Memphis, which became under the Ptolemies the second centre of his worship. At Abydos, the centre of the Osiris-cult, Sarapis became identified with, and so supplanted in name, the older deity. The votive inscriptions written on the walls of the temple of Seti by Greeks are commonly addressed to Sarapis⁸: and on the stelae of the Graeco-Roman period from the cemetery of Abydos, while the scenes show Osiris in his Egyptian form seated in state to receive the dead man, the Greek dedications are to Sarapis.⁹ And, in a trilingual inscription, probably from Abydos, the name of Osiris in the Egyptian text is translated by Sarapis in the Greek, while the Egyptian name of the dedicator's father, Psenusire, is rendered as Sarapion.¹⁰

Besides supplanting Osiris, and thus as a Chthonic god representing the Greek Hades in Egypt, Sarapis was equated with Zeus, doubtless in virtue of

¹ *R.A.* ii. 3rd ser. 177.

² *R.E.G.* iv. 56.

³ *C.I.G.* iii. 5115.

⁴ *C.I.G.* iii. 4915^c, 4922^d.

⁵ See R. S. Poole, *B.M. Cat. Coins*, 'Alexandria,' p. lxiv.

⁶ Tacitus, *Hist.* iv. 83.

⁷ G. Botti, *Rapport sur le Musée Gréco-Romain d'Alexandrie*, 1899, p. 51.

⁸ A. H. Sayce, *P.S.B.A.* x. 377.

⁹ See nos. ii. and iii.

¹⁰ *C.I.G.* iii. 4969.

the position which each held as chief of the gods of his country; and the result was a worship under the double name of Zeus Sarapis.¹ Another identification was made of Sarapis and Helios²—possibly under the influence of the priestly traditions of Osiris as a sun-god. The fullest statement of this kind is to be found in a graffito from a quarry near Ptolemais, which declares

Εἰς Ζεὺς, Σάραπισ, καὶ Ἥλιος Ἐρμάνουβις.³

In view therefore of the general character of the development of Sarapis-worship, it is interesting to find this example of a distinctive epithet applied to him, especially as the epithet is such a peculiarly Greek one. It markedly refers to Sarapis as the god of Alexandria, which was always ἡ πόλις to the Greeks of Egypt, and of which the dedicator of the statue was a citizen. No other Egyptian or Graeco-Egyptian god was, or could have been, given this title: which serves to show how large an influence Greek ideas had exercised in this particular cult.

The deme-name of the dedicator is, as frequently is the case in the Roman period at Alexandria, a double one. The Alexandrian demes appear to have been curiously complicated: besides the combination in this inscription, which is not infrequently found,⁴ there occur Φυλαξιθαλάσσειος ὁ καὶ Ἀλθαιεύς,⁵ Φυλαξιθαλάσσειος ὁ καὶ Ἡράκλειος,⁶ Αὐξιμητόρειος ὁ καὶ Ἀήνειος,⁷ and Αἰλαναβίτιος ὁ καὶ Ἀλθαιεύς.⁸ As these demes also occur singly, it seems probable that an Alexandrian citizen could belong to two demes at once.

The statement by the dedicator that he had provided the balance of the cost of the statue beyond the usual contribution is one to which I have not been able to find a parallel in Egypt. It appears from the receipts on ostraka, that the expenses of erection of statues to the Roman emperors were commonly met by a levy on the inhabitants of the district⁹; but there is no evidence that any similar practice obtained in regard to the statues of deities, nor would it appear to suit the phrascology of this inscription. Possibly a man who had only contributed a certain part of the cost of a statue was allowed by custom to have his name inscribed as dedicator: and in this case Nemesianus would wish it to be recorded that his gift was not limited merely to the amount which entitled him to such honour.

¹ *C.I.G.* iii. 4863^c.

² *C.I.G.* iii. 4962.

³ U. Bouriant, *Mém. Miss. Arch. Egypt.* viii. 3, 366.

⁴ *e.g.* B.G.U. 193 · O.P. 95

⁵ O.P. 273.

⁶ *Ibid.*

⁷ O.P. 261.

⁸ Pap. B.M. 298 Wilcken corrects the first word to Τειχαναβάτιος (*Archiv für Papyrusforschung* i. 159).

⁹ Wilcken, *Griech. Ostr.* i c. iv § 15.

II.—GHIZEH MUSEUM, No. 9210.



Τάκυβις Ἡρακλήου ἀνέθηκε θεῷ μεγιστῷ Σέραπι(ιδι).

The inscription, in letters .012-.017 high, is on a sandstone stele .335 x .25 from Abydos.

III.—GHIZEH MUSEUM, No. 9208

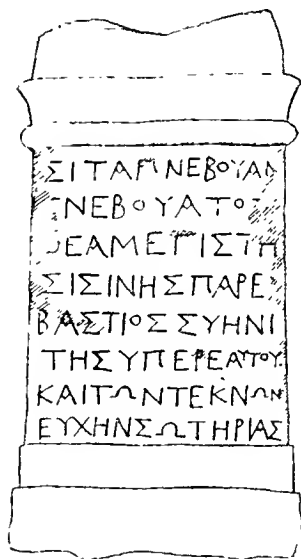


[.] ἀπραιδου Ταήτης θυγα(τρὸς) | [᾿Α]ρούβι(ο)ς μητρὸς Σεντούνι(ο)ς |
[πα]ρὰ τοῦ κυρίου Σεράπιδος | [τοῦ] ἐν ᾿Αβύ(δω)· Φαμεν(ὦθ) ι'.

On a similar stele to the last, 3×26 , from Abydos: letters .009–.012 high.

These two stelae are of a type commonly found at Abydos, and are given here to illustrate the point mentioned above with regard to the identification of Osiris of Abydos with Sarapis. The relief is a debased copy of the earlier representations of the presentation of the mummy to Osiris and Isis by Anubis, and the characteristic adjuncts of the Egyptian scene are preserved—the winged disk and pendent uraei crowning the stele, with the mummy lying on the sacred boat below, guarded by two jackals; and was-sceptres flanking the relief. But the god named in the inscription is Sarapis, whose name has assumed its Roman form of Serapis.

IV.—GHIZEH MUSEUM, No. 9300.



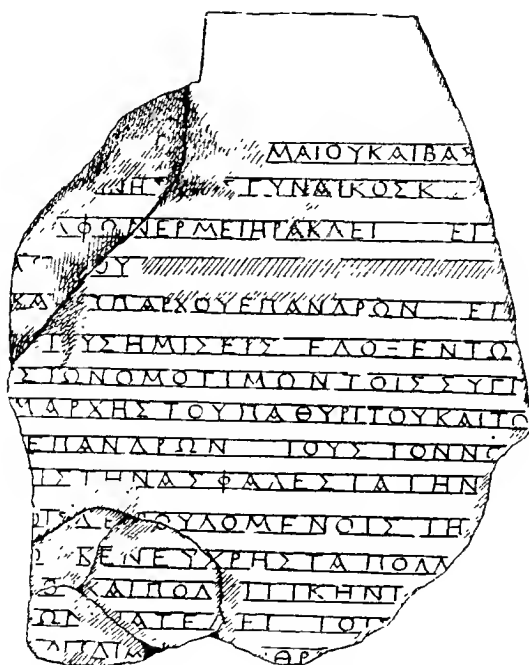
Σιταπνέβουαν | Τρεβούατος | θεᾷ μεγίστῃ | Σισίνης Παρεν | βύστιος
Συημι | της ὑπὲρ ἑαυτοῦ | καὶ τῶν τέκνων | εὐχὴν σωτηρίας.

This inscription is in fairly good letters .006–.011 high, on a small limestone altar $23 \times 13 \times 13$. The Museum records do not show where it was found. Date: about 200 B.C.

The name of the goddess to whom the altar is dedicated is noteworthy, as an Egyptian title appears to be given almost completely in transcription by the Greek. Mr. F. Ll. Griffith has suggested as a probable rendering, assuming that the endings of the words were slightly modified 'Daughter of

the daughter of the Sole Lord, the Sole Mistress, the great goddess.' Such a transcription is very unusual: as a rule, when an Egyptian name is given in Greek characters, it is altered so as to present a Greek form; while the Egyptian gods are habitually addressed by the names of their supposed Greek equivalents, as will be seen in the next inscription.

V.—GHIZEH MUSEUM, No. 9246.



Ὑπὲρ βασιλέως Πτολεμαίου καὶ Βασίλισσης Κλεοπάτρας | τῆς καὶ
 Τρυφαιῖνης [τῆ]ς γυναικὸς καὶ ἀδελφῆς θεῶν φιλοπατόρων | καὶ φιλα-
 δέ]λφων, Ἑρμεῖ Ἡρακλεῖ· ἐπ[ι..... |] α[...]ου
 [..... |] καὶ [ι]πάρχου ἐπ'
 ἀνδρῶν ἐπ[..... |] τ[ο]ὺς ἡμίσεις ἔδοξεν τῷ
 [..... |]ς τῶν ὁμοτίμων τοῖς συγγ[ένεσι..... |
 καὶ πολε]μάρχης τοῦ Παθυρίτου καὶ το[ῦ] Λατοπολίτου(?) | καὶ ἡγεμῶν(?)
 ἐπ' ἀνδρῶν τοὺς τὸν νόμον οἰκοῦντας... | εἰς τὴν ἀσφαλεστέτην
 [..... |] τ[ο]ὺς δὲ βουλομένοις τη[..... | ...
 πεπ]ο[ι]ή]κεν εὐχρηστα πολλὰ [..... |]ο[.] καὶ πο-
 λ[ε]ιτικῶν [..... |]ων [δ]ατελεῖ τοῖς [..... |
 καὶ ἰδία [.....]θρ[..... |

This inscription, unfortunately much mutilated, is carefully cut in letters .006–.008 high between ruled lines on a slab of limestone, the remaining part of which measures .26 x .22. According to the Museum Journal, the stone

came from Erment. It is noticed by S. de Ricci in *Rev. Arch.* 3rd ser. xxxviii. p. 308. Date: 80 69, B.C.

In spite of the damaged state of the stone, there can be little doubt as to the restoration of the names of the king and queen in the first three lines, which gives the first instance of the use of the name Tryphaena in an inscription of Ptolemy XIII and his wife.¹ The remainder of the text is only sufficient to show that it has contained an honorary decree to some polemarch of the Pathyrite nome.

An important point is illustrated by the dedication of the stele to Hermes-Herakles. As soon as the Greeks had established, through their settlement at Naukratis, a regular trading connection with Egypt, the information which they gathered concerning the gods of the country was conveyed to their old homes, and furnished materials for reflection to the philosophers there. This information was, however, of the most superficial kind; the names of the gods, the forms by which they were represented, the manner in which their festivals were conducted, whatever outward appearances presented themselves most strikingly, were reported; and upon this basis was built a theory of the identity of most of the Greek and Egyptian gods. There was never in Greece any true philosophy of religion, or any attempt to inquire into the underlying principles and ideas of theological systems; and, consequently, the slightest resemblance in outward forms was accepted as sufficient ground for an identification; until the absurdity went so far as to allow Herodotus to state that practically all the names of the Greek gods came from Egypt.

The result of this theory was that, as soon as the conquest of Egypt by Alexander, and its organisation by Ptolemy, led to the settlement of considerable numbers of Hellenic or Hellenised veterans in different parts of the country, they found themselves quite at home in regard to matters of religion. They had no need to build temples or appoint priests of the gods whom they had been accustomed to worship, when there were ready to hand temples and priests of gods whom their philosophers had declared to be the same, though under different names. So they saved trouble and expense by worshipping with the Egyptians.

These Egyptians, on their side, found no difficulty in accepting the identification of gods proposed by the Greeks. The existing Egyptian religion was, in fact, a fusion of many systems; the bases composed probably of successive strata of negro and Libyan, Mesopotamian, and Punite theologies, upon which had been built an edifice composed of portions taken from all these, and varied by fragments of Hittite, Syrian, Persian, and Indian ideas.² The Greek gods could readily be fitted into this miscellaneous collection: many of the Egyptian deities already had three names—for instance, Ptah-Sokar-Osiris; the addition of a fourth would cause no confusion.

The alteration in the position of the Egyptian priests probably contributed to the amalgamation of the gods. Under the native kings of the

¹ Jouguet restored the name in an inscription no. 9296, published in *B.C.H.* xx. 197. from Hermopolis Magna in the Ghizeh Museum.

² See Petrie, *Religion and Conscience*, p. 26.

old and middle kingdoms, the power of the priesthood seems to have grown steadily, and their wealth increased, till the culminating point of the priest kings of the twenty-first dynasty. While they occupied this commanding position, it would probably be to their advantage to adopt and multiply gods: as every new god could be made an excuse for demanding fresh endowments. But the position was entirely reversed when Egypt began to be overrun by foreign invaders, who took less interest in the gods than in their treasures; and when foreign kings ruled the country, each of whom appropriated as much of the temple property as possible. The priests were faced by the problem, what to do with their plethora of gods: they had more than they could worship in proper style on their diminished income: and yet, when a god was once created, he could not be annihilated. So they adopted the expedient of amalgamation.

The dedication to Hermes-Herakles now under consideration is explained by this process. In pure Greek theology, there obviously could be no connection between these gods. But in the Graeco-Egyptian fusion, Hermes represented Thoth, and Herakles Khonsu. Thoth and Khonsu were both lunar gods, and therefore easily identified: and the fact of their identification in the district about Pathyris and Hermonthis is testified by the occurrence of the proper name Khonsthout, which is found in Greek papyri¹ and also, Mr. Griffith informs me, in demotic. So the Greeks of Pathyris worshipped Thoth-Khonsu as Hermes-Herakles.

Another instance of 'translation' of Egyptian deities into Greek may be cited to show the utter confusion to which the theology of Egypt had been reduced. There is in the Berlin Museum a dedication,² dated in the fifth year of Augustus, to Herakles-Harpokrates: where Herakles doubtless represents Har-shes, the local form of Horus at Herakleopolis Magna, with whom he was there usually identified: and so it was a simple matter to equate him further with another Horus, and make a compound Herakles-Harpokrates out of two gods who originally had no single attribute in common.

VI.—GHIZEH MUSEUM, No. 9223.

ΕΥΤΥΧΟΣ ΚΑΙ ΕΠΑΓΘΩΝ ΜΑΡΚΩΝ ΑΥΤΗΛΩΝ ΑΙΚΚΑΛΩΝΙΤΩ ΚΑΙ ΘΕΟΦΙΛΩΝ
 ΕΝ ΑΡΧΩΝ ΓΥΜΝΑΣΙΑΡΧΩΝ ΚΑΙ ΑΓΩΝΟΘΕΤΗ ΑΠΟ ΤΗΣ ΕΙΡΑΣΘΥΜΕΛΙΚΗΣ
 ΚΑΙ ΞΥΣΤΙΚΗΣ ΣΥΝΟΔΟΥ + Η ΦΙΣΜΑΤΙΤΕΤΙΜΗ ΜΕΝΩΦΙΛΟΤΙΜΩΣ
 ΑΛΙΦΟΝΤΙΥΙΩΝ ΜΑΡΚΟΥ ΑΥΡΗΛΙΟΥ ΘΕΟΦΙΛΟΥ ΤΟΥ ΚΑΙ ΑΦΡΟΔΙΣΙΟΥ
 ΓΥΜΝΑΣΙΑΡΧΗΣ ΑΝΤΟΣ ΚΑΙ ΑΓΩΝΟΘΕΤΗΣ ΑΝΤΟΣ ΚΥΙΩΝ ΜΑΡΚΟΥ
 ΑΥΡΗΛΙΟΥ ΕΔΑΙΜΟΝΟΣ ΤΟΥ ΚΑΙ ΑΦΡΟΔΙΣΙΟΥ ΤΙΜΝΑΣΙΑΡΧΗΣ ΑΝΤΟΣ
 ΚΑΙ ΑΓΩΝΟΘΕΤΗΣ ΑΝΤΟΣ ΟΥΓΑΤΡΙΔΩ ΜΑΡΚΟΥ ΑΥΡΗΛΙΟΥ ΤΕΡΑΚΤΟΥ
 ΚΑΙ ΕΥΔΑΙΜΟΝΟΣ ΓΥΜΝΑΣΙΑΡΧΗΣ ΑΝΤΟΣ ΚΑΙ ΑΓΩΝΟΘΕΤΗΣ ΑΝΤΟΣ
 ΑΠΑΝΤΩΝ ΑΠΟ ΤΗΣ ΕΙΡΑΣΘΥΜΕΛΙΚΗΣ ΚΑΙ ΞΥΣΤΙΚΗΣ ΣΥΝΟΔΟΥ
 ΠΡΟΤΟΝΩΝ ΓΥΜΝΑΣΙΑΡΧΗ ΚΟΤΩΝ + Η ΦΙΣΜΑΤΙΤΕΤΙΜΗ ΜΕΝΩΝ
 ΤΟΥΣ ΠΡΩΤΟΥΣ ΦΑΜΕΝΩΘΛ

¹ *E.g.* Louvre pap. 5311.² No 10231.

Ἵπὲρ Αὐτοκράτορος Καίσαρος | [Δο]μιτ[ιανοῦ] Σεβαστοῦ Γερμανι|κοῦ
 τύχης καὶ τοῦ πάντος οἴκου | αὐτοῦ Ἥρα θεὰ μεγίστη Ὠρος καὶ | Παίως
 ἀμφότεροι Πάωτος | Κολλούθου ἱατροὶ τὴν ἀνοικο|δομήν ἐπ[οι]ήσαντο κατ'
 εὐ|σέβειαν ἐπ' ἀγαθῶ· | ἔτους ἐβδόμου Αὐτο κράτορος Καίσαρος | [Δομι-
 τianoῦ] Σεβαστοῦ | [Γ]ερμανικοῦ, Παχῶν ιη'.

The limestone stele on which this inscription is cut, in letters .018-.023 high, is of Egyptian shape, with rounded pediment, in which is the winged disk with pendent uraei, and measures .79 x .52. Under the disk are two roughly cut cows, facing each other. The date is May 13th, 88 A.D.

The main interest of the inscription lies in the dedication to Hera, which is almost unique in Egypt. It is true that at Naukratis the Samians built a temple to Hera the great goddess of their home¹: but the early cults of Naukratis were isolated from the rest of Egypt. In Graeco-Egyptian theology Hera hardly ever appears. Herodotus states that she was one of the Greek deities whose names did not come from Egypt²: in other words, that she did not resemble any particular Egyptian goddess. Only in the extreme south, at Elephantine, she was equated with the cataract-goddess Sati³; and the temple of Sati there was known to the Greeks as the Heraion⁴: and at Thebes there was also a building called the Heraion in Greek documents⁵. But at Alexandria, where it might have been expected that traces of her worship would be found, there is no mention of her in inscriptions and no representation of her on terracottas or coins, except for a single type of Hera Argeia on a tetradrachm of Nero.⁶ It is therefore somewhat remarkable to find two physicians, who, to judge by their names, were of Egyptian race, dedicating a building to Hera, apparently as a purely Greek goddess, and with the Greek associations of the cows given in the relief.

In the second and eleventh lines of the inscription, the name of Domitian has been erased, as usually occurs.

VIII.—GHIZEH MUSEUM, No. 9230.

ΑΡΤΕΜΙΔΟΣ

ΠΕΡΓΑΙΗΣ

Ἀρτέμιδος | Περγαίης.

This inscription is cut on a roughly panelled slab of blue marble .29 x .35, in letters .02-.028 high. Date—fourth century B.C.

The find-spot of this stone is unfortunately not recorded: but the only place in Egypt from which it is likely to have come is Naukratis. In any case, it represents a local Hellenic cult transported into Egypt by Greek colonists: Artemis of Perga would stand for any Pamphylian settlers, in the same position as Zeus for the Aeginetans, Apollo for the Milesians, and Hera for the Samians at Naukratis.

¹ Hdt. ii. 178.

² Hdt. ii. 50.

³ *C.I.G.* iii. 4893; *M. L. Strack, Dyn. Ptol.* p. 251, no. 95. *C.I.L.* iii. 75.

⁴ J. P. Mahaffy, *Hermathena*, 1896, p. 273.

⁵ Turin pap. 1.

⁶ *B.M. Cat. Coins*, 'Alexandria,' 132.

IX.—GHIZEH MUSEUM, No. 9301.

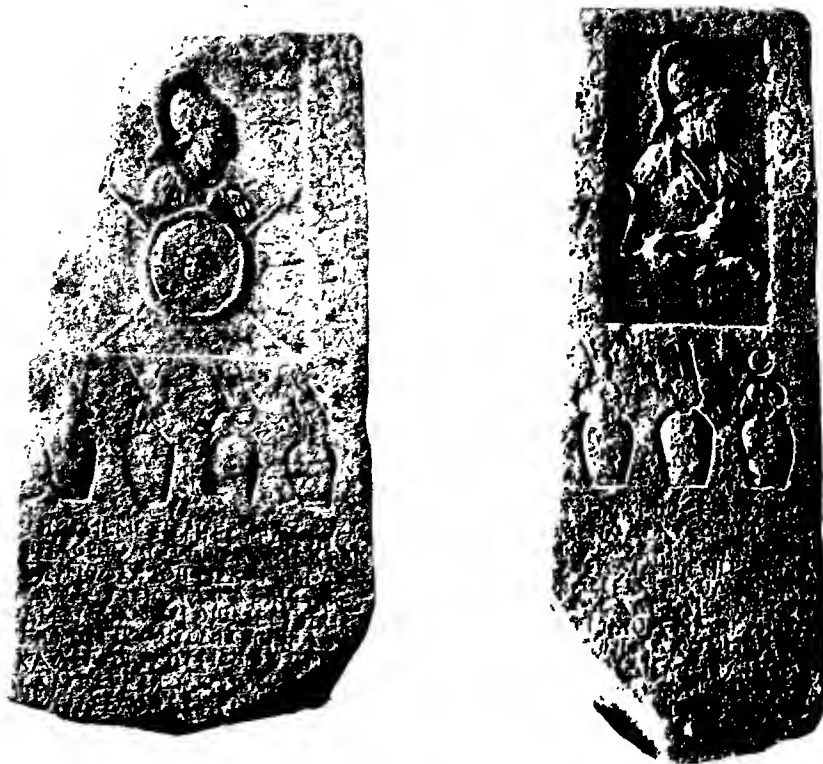
ΑΡΤΕΜΙΔΩΡΟΥ
 ΑΣΣΥΝΕΦΗΒΩΝ
 ΕΡΜΗΝΑΝΕΘΗΚΕ

| Ἀρτεμιδώρου | [] ας συνεφήβων | [] Ἑρμῆν
 ἀνέθηκε.

Only half of the black granite statuette base, on which this is cut remains: it measures '07 high x '18 in diameter. The letters, '006 — '01 high, are apparently of the early part of the second century B.C.

The adoption in Egypt of the Greek associations of ephēbi belonging to the same year has been known previously from inscriptions found at Soknopaiou Nesos in the Fayum.¹ There, the dedications were to the local god Soukhos: in this instance the object of worship was Hermes, doubtless in his Greek character as patron of the gymnasium rather than as identified with any Egyptian deity.

X.—GHIZEH MUSEUM, No. 9267.



¹ See Mahaffy, *Hist. of Egypt*, iv. 219.



INSCRIPTIONS DOWN SIDES OF PANELS.

(1) <i>Left.</i>	<i>Right.</i>	(2) <i>Left.</i>	<i>Right.</i>	(3) <i>Left.</i>	<i>Right</i>	(4)
(lost)	MI	K	K	Z	(lost)	(lost)
	AI	Λ	Υ	EY		
	ΦO	Υ	A	KY		
	NE	ΘI	N	Δ		
	TI	ΠO	O	IC		
	XE	CI	X	TE		
	CI	Δ	A	ME		
	Π	A	I	ΓIC		
	ΛH	ON	T	TE		
	TA	Γ	A	KE		
		AI		AA		
		HO				
		X				
		E				

INSCRIPTIONS BELOW.

- (1) ΕΙΜΙΜΕΝΕΣΙΕΡΗΣΣΤΡΑΤΙΗΣ
ΟΠΛΟΙΣΙΝΑΡΩΓΟΣ,ΚΑΙΣΑΡΟΣ
ΕΝΠΟΛΕΜΟΙΣΗΔΑΡΕΟΣΘΕ
ΡΑΠΩΝ,ΠΟΛΛΑΔΕΝΕΥΣΕ
ΒΕΕΣΙΘΕΩΝΕΡΓΟΙΣΜΕΜΟΓΗΚ
ΣΩΜΑΤΙΚΑΙΘΥΜΩΓΗΡΑΟ
ΚΑΛΕΓΩΝ,ΟΥΝΕΚΕΠΑΙΝ
ΣΑΝΤΕΣΕΠΕΥΤΑΚΤΟΙ:
ΝΤΕΣΑΟΦΡΟΣΥΝΙ
- (2) ΤΡΕΙΣΓΑΡΤΕΚΡΟΝΟΥΕΝ
ΜΕΝΑΔΕΛΦΕΟΙΟΥΣΤΕΚΕ
ΤΟΡΕΑ,ΖΕΥΣΚΑΓΩΤΡΙΤΑ
ΤΟΣΔΑΙΔΗΣΕΝΕΡΟΙΣΙΝΑ
ΝΑΣΣΕΙ,ΤΡΙΧΘΑΔΕΠΑΝ
ΔΕΔΑΣΤΑΙΕΚΑΣΤΟΣ
ΕΜΜΟΡΕΤΙΜΗΣ,ΗΤΟΙ
ΣΝΕΛΑΧΟΝΠΟΛΙΗΝ
ΝΑΙΕΜΕΝΑΙΕΙ,ΠΑ/
ΣΝΑΙΔΗΣΔΕΛΑ
ΝΗΕΡΟΕΝΤΑ,
- (3) ΕΙΣΚΑΙΣΑΡΜΕΓΑΣΑΥΤΟΚΡΑ
ΤΩΡΕΙΣΚΟΙΡΑΝΟΕΣΤΩ,ΕΙΣ
ΒΑΣΙΛΕΥΣΩΕΔΩΚΕΚΡΟΝΟΥ
ΠΑΙΣΑΓΚΥΛΟΜΗΤΗΣ
ΖΗΝΑΜΕΓΑΝΚΡΟΝΙΑΗΝΥΨΙ
ΖΥΓΟΝΑΡΓΙ ΚΕΡ
ΑΜΑΠΡΟΦΡΟΝ
ΠΟΝΕΝΝ
ΑΙΝΕΦΙΑ
ΗΝΑ
- (4) ΑΓΡΙΟΙΣΙΤΙΑΕΙΚΑΤΕΤΟΣ
ΔΙΣΔΗΜΟΝΑΠΑΝΤΑ,ΠΑ
ΝΟΣΟΡΕΣΣΙΝΟΜΟΙΟΚΑΤΕΙ
ΛΑΠΝΑΣΦΟΙΒΟΙΟΥ,ΑΝΔΡΕ
ΔΥΑΡΧΟΝΤΑΣΚΑΛΕΩΝ
ΚΑΤΑΕΘΝΟΕΚΑΣΤΟΝ,
ΕΝΟΥΣΙΕΡΗΑΣΕΩ
ΣΟΝΤΕΣΥΝΕΡ
ΕΙΣΕΚΑΤΟΝΔΙΣΠΑΝ
ΣΛΥΚΑΒΑΝΤΟΣ
ΑΙ

(1) [³Αρες, "Αρες βροτολοιγέ] μαιφόνε τ(ε)χεσιπλήτα.

Εἰμί μιν ἐξ ἱερῆς στρατιῆς | ὅπλοισιν ἀρωγός,
Καίσαρος | ἐν πολέμοις ἡδ' Ἄρεος θεῖράπων·
πολλὰ δ' ἐν εὐσέϊ βέεσσιν θεῶν ἔργοις μεμόγηκ[α] |
σώματι καὶ θύμῳ γήραος οὐκ ἀλέγων·
οὐτεκ' ἐπαι[ν] | σάντες ἐπ' εὐτάκτοιφ [βίῳ] |
νοῦν τε σαοφροσύνη[ν, τ' ἀστοὶ ἐπέκλείσαν.

(2) Κλῦθι Ποσείδαον γαίηοχε κυανοχαῖτα.

Τρεῖς γάρ τε Κρόνου εἰ)μὲν ἀδελφεοὶ οὖς τέκετο Ῥέα,
Ζεὺς καὶ γώ, τρίτα τος δ' Αἰδῆς ἐνέροισιν ἀ)νάσσει·
τριχθὰ δὲ πάν[τ]α δέδασται, ἕκαστος | [δ'] ἔμμορε τιμῆς·
ἢ τοι | [ἐγ]ὼν ἔλαχον πολίην | [ἄ]λλα ναίεμεν αἰεὶ,
παλ[λ]· [λομέν]ων, Αἰδῆς δ' ἔλα[χ]ε ζύφω)ν ἡέρ[ω]εντα.

(3) *Ζεῦ κύδιστε, μέγιστε, κέλα[ινεφῆς αἰθέρι ναίων.*

*Εἰς Καίσαρ, μέγας αὐτοκρά|τωρ, εἰς κοίρανος ἔστω·
εἰς | βασιλεὺς, ὃ ἔδωκε Κρόνον | παῖς ἀγκυλομήτης· |
Ζῆνα μέγαν Κρονίδην ὑψί|ζυγον ἀργικέ[ραυνον
...] ἄμα προφρον [...] πον ἐνν ... [...]
] . αἰνεφιλ[...] ηνα[...]*

(4) [_____]

**Αγριος ἰστιάει κατ' ἔτος | δις δῆμον ἅπαντα
Πα|νὸς ὀρεσσινόμοιο κατ' εἰ|λάπ[ι]νας Φοίβοιο
ἄνδρε | δυ' ἄρχοντας καλέων | κατὰ ἔθνος ἕκαστον· |
[τοῦτ' ἐ]θνους ἱερῆας ἔω |[θε] χοῶντε συνέρ|[γους]
εἰς ἑκατὸν δις παν|[τὸς ὁμῶ]ς λυκάβαντος|[ἀγῆλαι].*

These inscriptions are carved on the four faces of a limestone stele .975 × .45 × .36: on each face there is a sunk panel, with reliefs, and a line of lettering down either side of the panel: below these, a row of 'Canopic' figures, and, lower again, the main inscription. The stele comes from Alexandria, and may be dated to the end of the first century B.C.: the letters are .015-.03 high.

The reliefs in the panels are obviously connected in idea with the epigrams below them. The first side, the text on which is addressed to Ares, shows the bust of a soldier with a shield and crossed spears below: the second, in honour of Poseidon, has below a similar bust a sea-horse: the third, in honour of Zeus, an eagle: while the fourth has some creature too damaged for recognition.

So far, the conception of the whole work is Greek, and the motives obvious. But the rows of 'Canopic' figures below are more puzzling: and neither Mr. Griffith, who has assisted me in identifying the figures, nor I, can suggest any connexion between them and the rest of the composition. The following, according to Mr. Griffith, are the gods represented—passing on each side from right to left.

- (1) Osiris: Horus: Isis: [Nephthys?]
- (2) Thoth: Amon: Mut.
- (3) []: Shu: Tefaut: Hathor.
- (4) Ra: Atum: Nut.

He suggests that the underlying idea is probably astrological: thus, the opposite sides (4) and (2) are headed by Ra and Thoth for Sun and Moon: (1) has Osiris, possibly for the planet Jupiter, and the lost figure in the front of (3) may have been Geb, the planet Saturn. To each of these leaders were then added his usual associates in Egyptian religious tradition.

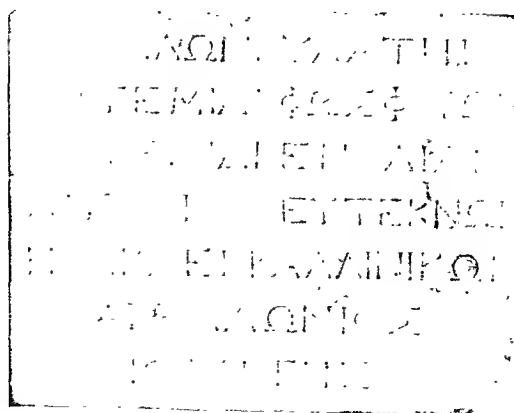
Such a wealth of 'Canopic' figures is quite novel, and may throw some light on the nature of these representations. The earlier vases, which were made in sets of four to take the viscera of dead bodies when extracted during

the process of mummification, and were crowned with heads of the four genii of Amenti, are well-known. But, though these may have suggested the form of the later 'Canopi,' there does not appear to be any other connection. The name Canopus for this class of figures is derived from Rufinus, who described them as earthenware vases with heads of deities.¹ But he does not mention any relationship between them and funeral ceremonies. Hitherto, the types known have all been ascribed to Isis and Osiris, whose place in the lower world might justify tracing the origin of the form to the older class: these types occur on coins,² in terracotta, and, in one instance at any rate, in bronze.³ But the collection of deities represented on this stele goes strongly against the theory, as the majority of them are not connected in any way with the dead. It seems to me probable that these vases with heads of gods were a local product of Canopus, and got their name from the place of their origin. That great pleasure resort of the Alexandrians may well have supplied these grotesque forms of gods, the particular shape of which may have been first adopted at a venture, and afterwards perpetuated as it caught the public fancy. The figures of Osiris and Isis would naturally be the most popular: but this stele shows that any deity might be treated in this manner.

The Homeric quotations offer some points of interest. The lines down the sides of the panels are respectively from Il. E. 31, Od. ι. 528, and Il. B. 412. The epigram on the second face is taken bodily from Il. ο. 187 ff., and in the first line has the reading *τε Κρόνου* rejected by Aristarchus, as well as *τέκετο* 'Péa like most MSS.; while in the second line it varies from the received text, which gives *ἀνάσσω* as the last word. The epigram on the third side contains a line and a half from Il. B. 204-5, the only noticeable variant in which is *ἀγκυλομήτης* for *ἀγκυλομήτεω*.

To the foregoing inscriptions from Ghizeh I desire to add two others of interest.

XI.



¹ *Hist. Eccl.* ii. 26.

² See R. S. Poole, *R.M. Cat. Coins*, 'Alexandria' p. lxxv.

³ Berlin Museum, no. 9008.

Ἀπόλλωνι Ἑλλάτῃ | Ἀρτέμιδι Φωσφόρῳ | Ἀρτέμιδι Ἐνοδίᾳ | Δητοῖ
Εὐτέκνῳ | Ἡρακλεῖ Καλλινίκῳ | Ἀπολλώνιος | διοικητής.

This inscription is beautifully cut, in letters .014-.018 high of the latter part of the third century B.C., on a slab of fine limestone, which was bought by Professor Petrie in 1899, and is now in the Fitzwilliam Museum at Cambridge. He considers that there is little doubt that the stone was found at Koptos.

The group of gods to whom this dedication is addressed is purely Greek, alike in association and in epithets.

XII.

ΤΑΥΤΗΛΙΟΣ ΚΑΛΠΟΥΡΝΙΑΝΟΣ ΑΠΟΛΛΩΝΙΔΗΣ
ΧΙΛΙΑΡΧΟΣ ΕΠΙΤΡΟΠΟΣ ΓΑΛΛΙΑΣ ΑΚΟΥΙΤΑΝΙΚΗΣ
ΕΠΙ ΚΗΝΣΩΝ ΕΠΙΤΡΟΠΟΣ ΜΥΣΙΑΣ ΤΗΣ ΚΑΤΩ ΕΠΙ
ΘΡΑΚΗΣ ΕΠΙ ΔΕΛΜΑΤΙΑΣ ΕΠΙ ΑΙΓΥΠΤΟΥ ΙΔΙΟΥ
ΛΟΓΟΥ

ΖΗΣΑΣ ΕΤΗ ΝΕ

Τ. Αὐρήλιος Καλπουρνιανὸς Ἀπολλωνίδης, | χιλίαρχος λεγίωνος ἰδ' Ἐμίνης, χιλ(ίαρχος) λεγ(ίωνος) | ἢ γ' Ἐμίνης, ἐπίτροπος Γαλλίας Ἀκουιτανικῆς, | ἐπί(τροπος) κήσων, ἐπίτροπος Μυσίας τῆς κάτω, ἐπί(τροπος) | Θρακῆς, ἐπί(τροπος) Δελματίας, ἐπί(τροπος) Αἰγύπτου ἰδίου | λόγου. | ζήσας ἔτη νε'.

The stone—a slab of marble—on which this inscription is cut was offered in 1882 by a Greek dealer to M. Maspero, who made a copy of it; but, before he could conclude negotiations, the dealer disappeared. Maspero's copy was published by E. Miller in the *Rev. Arch.* i. ser. 3, p. 207: but no more was heard of the stone till 1899, when it turned up in a dealer's shop in Cairo, from which I got a squeeze by the aid of Mr. J. E. Quibell. It was stated by the first dealer to have come from Senballaoutin (Mendes). As there were two small errors in the original publication, ΑΣΓΙΩΝΟΣ in l. 2 and ΘΡΑΚΣ in l. 5, and the lines were wrongly divided, it seems worth while to republish it in facsimile.

The date of the inscription is about 200 A.D.: it is valuable as giving the official career of a man who held ultimately the post of Idilogus of Egypt, as to which very little is known, except that the holder was a Roman, probably of equestrian rank, appointed directly by the emperor to supervise the financial administration of Egypt; while nominally subordinate to the prefect, he was virtually independent of his control, in view of the manner of his appointment, and thus could keep a check on the prefect's management of the revenue, in the interests of the emperor.

I have to thank the authorities of the Ghizeh Museum for permission to publish nos. i.-x. and of the Fitzwilliam Museum for no. xi.: also M. Seymour de Ricci for looking over the proofs of this article, and comparing my readings of the Ghizeh inscriptions with those of M. Jouguet and, in the case of no. x., of M. Bouriant, which are in his hands. The restoration of the epigrams on sides 1 and 4 of no. x. is mainly due to the assistance of Professor Ernest Gardner.

J. G. MILNE.

THE GREEK HOUSE.

THE prevalent notions about the Greek house, however much they have varied from one another, have usually agreed on certain essential characteristics; indeed, it may almost be said that there is a general consensus of opinion

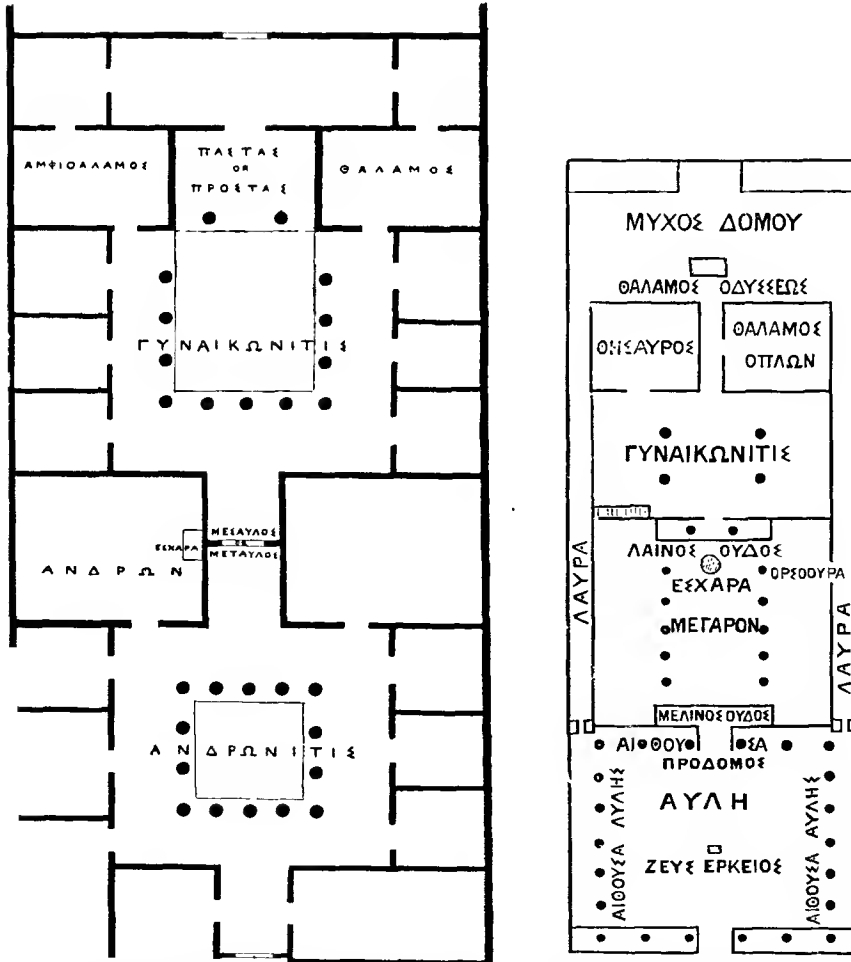


FIG. 1.—(a) GREEK HOUSE (CONVENTIONAL PLAN). (b) HOMERIC HOUSE (CONVENTIONAL PLAN).
After P. Gardner and Jevons, p. 36. After *J.H.S.* vii. p. 173.

among archaeologists in favour of a normal plan such as that given in P. Gardner and Jevons' *Manual of Greek Antiquities*. According to this plan the Greek house consists of two courts; the first, which is entered through a vestibule from the street, is called the *ἀνδρωνίτις*: it is the court of the men, and is surrounded by colonnades, out of which open the living and sleeping rooms of the male members of the household. Behind this is a passage, closed by the *μέταυλος* or *μέσανυλος θύρα*, leading into a second court called the *γυναικωνίτις*, or court of the women. At the back of this second court is the deep recess known as the *παστὰς* or *προστὰς*; on the other sides are colonnades; and around the court are the living and sleeping rooms of the women, the largest and most important, the *θάλαμος* and *ἀμφιθάλαμος*, being on either side of the *παστὰς*.

Of course all who have written about the subject have recognised that this normal plan was subject to modifications dependent upon the situation and other conditions: in particular, it was evident that in the crowded areas of an ancient city it was often impossible to command the necessary space, and that poorer people had to content themselves with one court. But such arrangements have generally been regarded as deviations, the two-court house being the normal type; in particular, it has been thought essential that the front door should lead, not into the women's quarters, but into the *ἀνδρωνίτις*, the proper place for the reception of guests. And moreover, owing chiefly to the analogy of this normal Greek house, it has been supposed that in the Homeric house also the quarters of the women lay at the back of the Hall of the Men, and were entered through it. The whole theory is consistent and plausible, and it is with some diffidence that I call it into question. But I venture to think that it is difficult to reconcile with the evidence of ancient writers, that it is inconsistent with such remains of ancient Greek houses as have actually been preserved, and that we can easily see how the erroneous notion may have arisen. It appears then that there is need for a reconsideration of the whole question, the present article must be regarded only as an outline sketch, to indicate the lines on which the reconstruction must proceed.

In the case of the Homeric house, there is happily no need to review the literary evidence, because this has already been done by Mr. Myres in the last number of the *Hellenic Journal*.¹ His main contention seems to me indisputable. It is difficult, if not impossible, to understand many passages of the *Odyssey*, if one assumes that the women's quarters lay behind the men's hall, and that the main access to them was by a door in the back of that hall; and I think Mr. Myres is also right in maintaining that so strange an assumption must have arisen from the analogy of the conventional notion of the Hellenic house with two courts. How closely the conventional plans of the Homeric and the historic house resemble each other may be easily realised by a glance at Fig. 1, *a* and *b*, where the two are reproduced side by side. This comparison probably suggested also the usual explanation of the

¹ *J.H.S.* xx. p. 128 *sqq.*

two courts at Tiryns as the men's and the women's courts of the same house—a theory not maintained by any arguments, but assumed as self-evident by

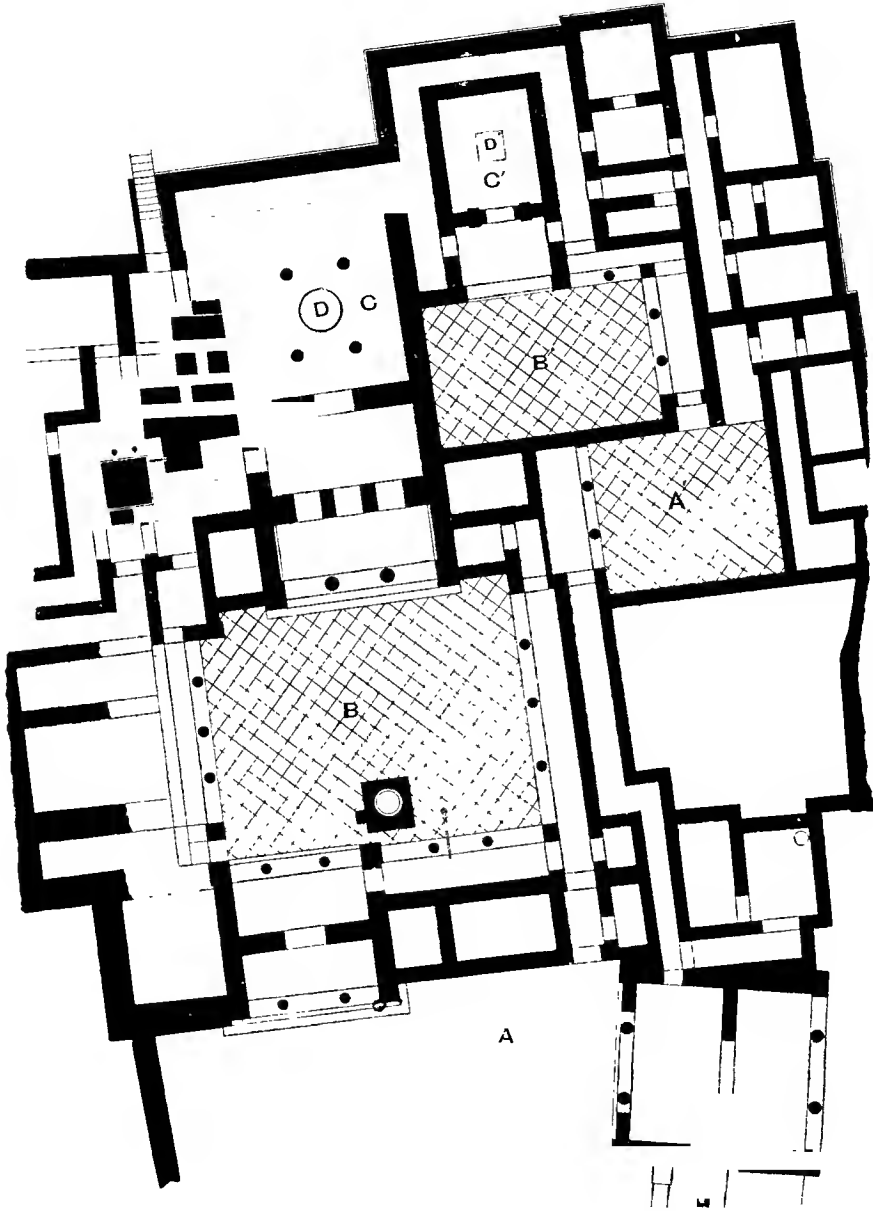


FIG. 2 —PALACE AT TIRYNS.

A }	B }	C }	D }	{ of first house.
A' }	B' }	C' }	D' }	

the excavators, and repeated ever since on their authority. Yet, when one comes to think about the matter, such a duplication of all parts of a house—

fore-court, court, hall, and chambers—for the use of the men and the women respectively is contrary to probability and to our knowledge of the society at least of the Homeric age. Sir Richard Jebb has pointed out that this duplication, and the isolation of women which it implies, is fatal to any attempt to explain the Homeric palaces on the analogy of the house at Tiryns; but the difficulty disappears when we realise that we have to deal at Tiryns not with one house, but with two, and that each of these, like

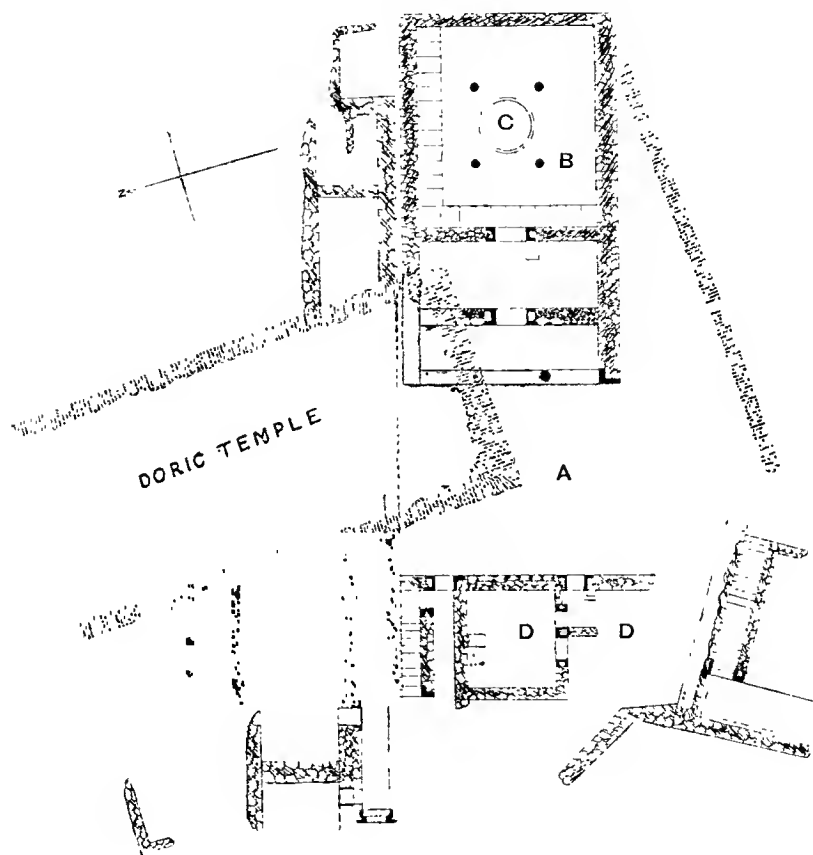


FIG. 3.—PALACE AT MYCENAE.

A. Court	C. Eschara.
B. Hall	D. D. Women's quarters.

that at Mycenae, probably had its own women's quarters though not a separate women's court. At Mycenae, as Mr. Myres remarks, much of the action of the *Odyssey* could easily find its place.

Neither at Tiryns then, nor in the houses described in the Homeric

¹ *J.H.S.* vii. 170.

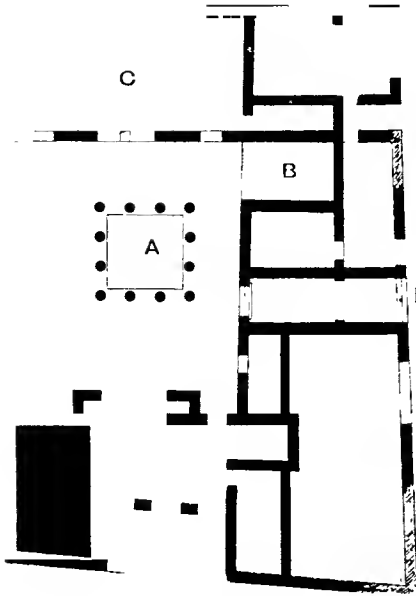


FIG. 4.—DELOS. HOUSE W. OF SACRED LAKE.

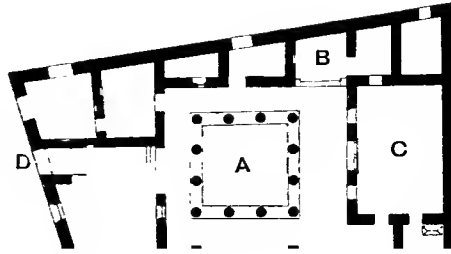


FIG. 6.—DELOS. HOUSE IN STREET BY THEATRE.

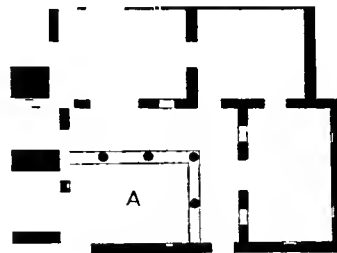


FIG. 7.—DELOS. HOUSE ABOVE INOPUS.

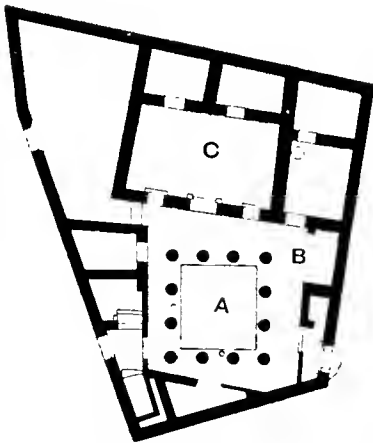


FIG. 5.—DELOS. HOUSE N. OF SACRED LAKE.

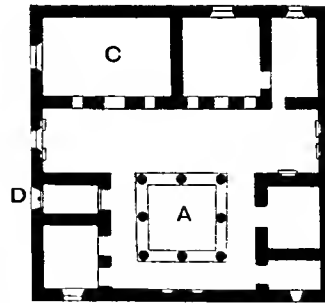


FIG. 8.—DELOS. HOUSE AT TOP OF HILL.

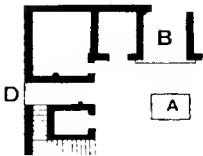


FIG. 10.—POMPEI. A SMALL HOUSE.

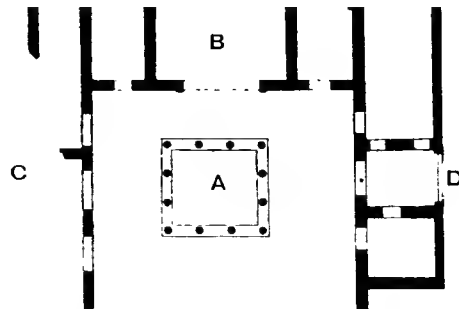


FIG. 9.—DELOS. HOUSE ON BANK OF INOPUS.

The plans of the houses on Delos are after *Bull. Corr. Hell.*, 1895, Pl. III.—V.
A. Court. B. Pastas or corresponding recess. C. Andron. D. Front Door.

poems, do we find any historic justification for the supposed Hellenic house of two courts: on the contrary, we find that this imaginary Hellenic house has been itself the cause of error in the interpretation both of Homer and of Tityns. We must next see what evidence there is for the existence of two courts in the house of the fifth and fourth centuries before our era.

Unfortunately no house of the fifth or fourth century has hitherto been found in a complete enough state for us to form any satisfactory notion of its plan, but at Delos the French excavators have brought to light several houses of the ensuing period. Though these houses differ among themselves in situation, in general conditions, and in many details of their arrangements, they have several features in common. Each of them is built round a single court; there is usually a colonnade round this court, at least on its north and east sides; the court is hardly ever in the middle of the house, but more towards the south and west; sometimes it is only separated by a wall from the road in one or both of these directions. Either at the north or the north-east corner of the court there is almost always a deep recess, evidently corresponding to the *παστὰς* devised to catch the winter sun and to escape the wind; the aspect of all these Delian houses is doubtless dictated by the prevalent N. E. winds, which sweep down with great force through the channel between Tenos and Myconos, and are bitterly cold in winter. Another feature common to most of the houses is a large room opening by doors and windows on to the court, and evidently to be identified as the *ἀνδρῶν* or guest-room for entertainments. In some cases there are indications of stairs leading to an upper story; but nowhere are there any traces of a second court.¹ There are some dangers in arguing from these Delian houses of the third and second centuries to houses in Athens a couple of centuries earlier; but it is unlikely that we should find no trace in the houses of the rich merchants of Delos of luxurious arrangements that were already customary in Athens. We should expect the earlier Attic houses to be simpler, not more elaborate. And this inference is borne out by almost all the literary evidence.

To classical scholars the most familiar picture of the Attic house is that in Plato's Protagoras, describing the hospitable mansion of Callias, the porticoes around its court where the distinguished guests held their discourses, and the chambers where some of them slept. There is, however, no direct reference here to a second court, though the women of the house must doubtless have had some separate living rooms into which they could retire when the court was thus occupied.

The clearest information as to the fifth or early fourth century is given us by Xenophon, who puts into the mouth of his master Socrates or of his favourite character Ischomachus many remarks that probably reflect his own opinions; he evidently had a keen interest in the subject. The question of

¹ The Greek houses recently discovered at Priene still remain unpublished; but I am informed that they confirm, in general, the

inferences here drawn from the houses at Delos.

aspect was regarded by him as paramount; 'if a house faces south,' he says, 'the sun will shine into the *pastas* in winter, and in summer it will be high over our heads and over the roof, and so we shall have shade. Accordingly we should build the rooms that face south higher, so that the winter sun may not be excluded from them, and the rooms facing north lower, that the cold winds may not penetrate into them.'¹ In all this there is no hint of more than one court. Aristotle almost repeats the same advice. 'Both for pleasure and for health a house should be breezy in summer and sunny in winter; and this will be the case if it faces the south and is not of equal breadth all round.'² This last word, *ἰσοπλατής*, might confuse us, in relation to Xenophon's recommendation that the house should be built higher on the north, but for the Delian houses, which at once illustrate Aristotle's words and give their explanation. The northern chambers, into which the low winter sun can shine from the court, are built deeper; while on the southern side the chambers are either shallower or altogether absent. It is evident that if there were two courts to consider, this heightening or broadening of one side would complicate the plan, and would require some modification; and the absence of any reference to two courts may fairly be taken to imply that there were not two courts to refer to. Moreover, that this one court, approached directly from the front door, was the place where the women of the house were usually to be found is shown by the statement of Plutarch that 'in old days, before everybody kept a porter, it was customary to knock on the door with a stick before entering a house, in order that a stranger might not come on the mistress or the daughter of the house, or a slave being chastised or the maid-servants screaming.'³

Perhaps no other document gives us such a good notion of the arrangements of a Greek house as the speech against *Euergetes* and *Mnesibulus*, commonly attributed to Demosthenes. The victim of these marauders relates⁴ how they broke into his house by the garden door, intruding on his wife and children, who were having their lunch in the court (*ἐν τῇ αὐλῇ*). They seized and carried off by violence all the furniture and household stuff; but the female slaves, who were in the tower that formed their quarters, shut themselves in when they heard the noise, and so saved its contents from being plundered. A certain *Hagnophilus*, who was passing by, was hailed by the neighbour's slaves; he did not think it proper to enter the house in the absence of the master, but saw from the neighbouring plot the goods being carried off and the robbers coming out of the house. Here it is evident that there was only one court, entered by a back door from the garden as well as by a front door from the street; that the women of the house used this court freely, and resented intrusion, and that they had also special quarters of their own, in what is here called a tower (*πύργος*).

So far we have avoided passages which make any explicit distinction between *ἀνδρωνίτις* and *γυναικωνίτις*. The existence of these two words, perhaps more than anything else, has led, if not to the invention of the two-

¹ *Mem.* iii. 8.

² *Occ.* i. 6.

³ *De Curios.* 3.

⁴ § 53.

court theory, at least to its general acceptance and retention. But their usage by Greek writers does not really lend much support to the theory. Xenophon, in making Ischomachus describe his house,¹ mentions the *ἀνδρωνίτις* and *γυναικωνίτις*, and states that the latter was shut off by a strong door, so as to protect its contents and to enable the master to control the intercourse of the male and female slaves; but it is clear that these objects would be as well or even better attained if the *γυναικωνίτις* were a sort of keep or *πύργος* than if it were another court. In Lysias, *de caede Eratosthenis*, the speaker describes his household arrangements with some detail.² He had 'a small double house, the upper and lower floors corresponding, in *ἀνδρωνίτις* and *γυναικωνίτις*'; when his child was born, for the sake of his wife's safety and convenience, he changed quarters with the women, and he lived upstairs, they downstairs. Accordingly, when he brought a guest home to dinner, he entertained him upstairs. Neither *ἀνδρωνίτις* nor *γυναικωνίτις* seems to have a definite meaning, and their usage varies in different writers. *Ἀνδρωνίτις* seems often to be merely an expansion of *ἀνδρῶν* or *ἀνδρῶνες*, the guest-chamber or chambers for the entertainment of male guests, the sense in which it is used by Vitruvius. *Γυναικωνίτις* sometimes means the quarters of the women of the house, including slaves; sometimes, on the other hand, it seems to mean the court and surrounding rooms for family use, in which the women lived when no guests were present. Thus in Lysias iii. 7, a man is charged with coming drunk one evening to another man's house, forcing open the door, and so entering the *γυναικωνίτις*, where some women of the family were. This suggests the passage of Plutarch about the custom of knocking before entering a house lest the women might be surprised within (*ἐν μέσῳ*), evidently in the *αὐλή*; and Vitruvius expressly identifies the court entered immediately through the front door, and the chambers surrounding it, as the *γυναικωνίτις*.

There remain several passages in which the *μέταυλος* or *μέσανλος θύρα* is mentioned; and this, especially in its second form, has usually been interpreted as the door between two courts, while *μέταυλος* has also been given a similar meaning, on the analogy of *μεταίχμιον* and *μεθόριον*. But neither explanation is necessary; *μέταυλος* may perfectly well mean behind the court, on the analogy of many other compounds with *μετά*; and *μέσανλος* may mean within the court, just as *μεσόγαιος* means inland or *μεσονύκτιος* in the middle of the night. The evidence of etymology being ambiguous, that of usage becomes paramount; and, if we exclude the opinions of late grammarians or scholiasts, who interpret the word according to their etymological theories, not from any knowledge greater than we possess about the ancient Greek house, we find that usage is decidedly in favour of the meaning 'behind or within the court,' not 'between the two courts.' The clearest evidence is offered by the house already quoted from Lysias *de caede Eratosthenis*. This house cannot, from the description, have had two courts;

¹ *Oec.* ix. 2.

² 92-94.

yet the master, when locked by his wife into his upstairs bed-room, hears in the night both the front door and the *μέταυλος* opened. Here the *μέταυλος* can only be a door at the back of the court, leading into the rooms then occupied by his wife and her attendants. We can hardly doubt that the strong door shutting off the women's quarters mentioned by Xenophon, and the door of the women's tower which is mentioned in the speech against Eucrgus, are also to be identified with the *μέταυλος θύρα*, though the fact that the word is not used in either case may perhaps imply that the name was not universally recognised. A precisely similar arrangement, a passage with a strong door, leading from the court to the women's rooms, is described by Achilles Tatius,¹ though his date makes his evidence of little value. And there is no early reference to the *μέταυλος* which implies that it lay between two courts. It appears therefore that the usage of the term *μέταυλος*, so far from confirming the existence of two courts, tells against the existence of more than one.

An interesting example of the use of the term *μέσανλοι θύραι* occurs in Euripides' *Alcestis*. Admetus, entertaining Heracles as his guest at the moment of his bereavement, bids his servants show the hero into the separate guest-chambers, which have an access outside the house, and to shut the *θύραι μέσανλοι*, that the sound of wailing may not reach the guest as he feasts.² It is obvious that it would be useless for this purpose to shut a door of communication between the two courts of the house, or between the men's and the women's quarters; the door referred to must be a door of communication between the house and the guest rooms. It may however be doubted whether any serious inference can be drawn from this passage as to the Greek house. The whole arrangement is dictated by stage exigencies and convention. Since the death and funeral of *Alcestis* was assigned to the middle door, it was clearly necessary that Heracles should be led into a side door, representing the entrance of a separate set of chambers, whence he was later to emerge for his famous scene with the slave; and so the *θύραι μέσανλοι* are to be imagined by the audience as separating the two sets of rooms in which the action behind the scenes is supposed to take place. Curiously enough, this passage from the *Alcestis* gives us the clue to what is otherwise an inexplicable statement in Vitruvius. At the end of his description of the Greek house³ he says 'inter duo autem peristylia et⁴ hospitalia itinera sunt quae mesauloe dicuntur quod inter duas aulas media sunt interposita.' He has just been speaking of the separate guest-chambers provided in splendid Greek mansions. It is very difficult to resist the conjecture that Vitruvius got this notion of the mesauloe from Euripides; he must have inferred from the reference in the *Alcestis* that the mesauloe were a means of communica-

¹ Έρωτ. ii. 19.

² l. 543—

χωρίς ξενῶνές εἰσιν οἱ σ' ἐνάξομεν

* * * *

ἡγοῦ σὺν, τῶνδε δωμάτων ἐξαπίους

ξενῶνας οἷζας, τοῖς δ' ἐφ' ἐστῶσιν φράσσον

σίτων παρῆναι πλῆθος· ἐν δὲ κλήσατε
θύρας μεσαύλους· οὐ πρέπει θοινωμένους
κλύειν στεναγμῶν οὐδὲ λυπεῖσθαι ξένους.

³ vi. 10.

⁴ So MSS.; Rose and Muller-Strubing emend.
to *ad*.

tion between the house and the *hospitalia* or *ξενῶνες*. In any case it is to be noted that he does not hint at the existence of a *μέσανδος* or *μέσανδος θύρα* in the place where one would naturally look for it according to the accepted theory, viz., in passing from the court of the women to that of the men.

A few words must be said here about Vitruvius' description of the Greek house. For I believe that description to be one of the chief sources of the prevalent erroneous conception, though no restoration which I have seen makes any attempt to follow his clear and obvious meaning. He begins with a correct description of the normal Greek house with its court or peristyle entered through a short passage from the front door, with the *pastas* or *prostas* at the back of the court and other chambers round it. This, he says, is called the *gynaeconitis*; and we have seen some evidence from earlier

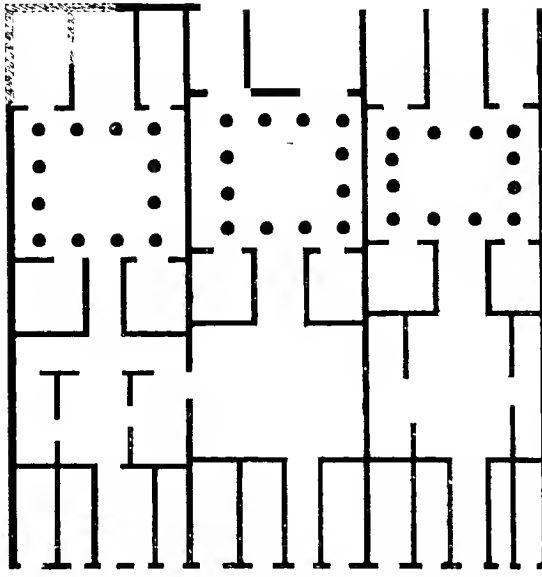


FIG. 11.—THREE ROMAN HOUSES FROM THE CAPITOLINE PLAN.

writers that it was occasionally so called, though the name was also applied in a narrower sense to the enclosed chambers of the women. To this, he says, were added more sumptuous courts and chambers, especially intended for the entertainment of male guests only, and therefore called *andronitides*. These courts and chambers are, in fact, to be regarded merely as an expansion of the *ἀνδρώνες* or the single *ἀνδρών*, the large dining room which we find opening out of the court in almost all the Delian houses. The two-court arrangement, which is somewhat similar

to what we see at Pompei, seems to have been adopted at about the same time by the Greeks and by the Romans, probably in about the second century B.C., but in neither case is there any evidence for an outer court of the men and an inner court of the women entered through it. In the Roman house, as Vitruvius expressly says, the peristyle as well as the *cavum aedium* was regarded as a place of public reception, not restricted to family use. And he warns us against the error of equating atrium and men's court, peristyle and women's court; for he says that, the Greeks having no atrium, the peristyle or *gynaeconitis* was the court you first entered in the Greek house, the *andronitis* being merely a luxurious excrescence. Had commentators and restorers kept more carefully to the evident meaning of Vitruvius' words, the chief errors as to the nature of the Greek house would have been avoided.

The origin of the now prevalent, and, as I think, erroneous conception of the Greek house as having two courts, an outer for men and an inner for women, is probably to be traced to a combination of several influences. First there is the apparent analogy of the Pompeian and Roman houses; then there is a kind of inverted interpretation of Vitruvius; and there is also certain corroborative or circumstantial evidence which we have found on examination to be illusory. Its chief recommendation is a certain continuity, from Homeric right down to Hellenistic and Graeco-Roman times; and if we destroy this continuity, it may well be expected that we should find some other relation or evolution to put in its place. I therefore conclude with an outline of what seems to me the most probable course of development of the normal Greek house.

The primitive form seems to have resembled the farm-house described by Galen,¹ as is suggested in P. Gardner and Jevons' *Manual*. It consisted of a court, entered by a door on the south side, if possible (Fig. 12). Opposite the door was the deep recess called the *prostas* or *pastas*, with the chief chambers on either side of it; other chambers and stables &c., surrounded the court. In the court was the altar of Zeus Herkeios; in the *pastas*, which was the living room, was the

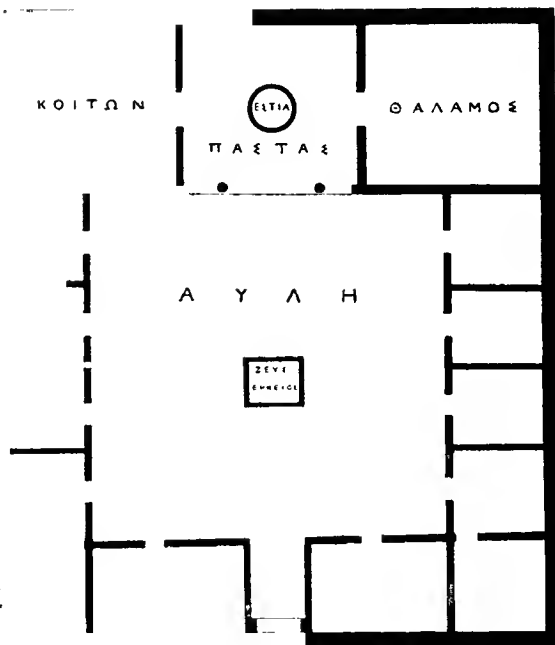


FIG. 12 — PRIMITIVE GREEK HOUSE.

Hestia or Eschara. The Mycenaean and the Homeric house, which are essentially identical, preserve many of these features; they have the doorway, the court, the altar and Eschara, the surrounding chambers; but instead of the *pastas* we find a new and extraneous feature—a hall with *prodomos* and *aithousa*, shut off by one or two partitions from the court. This *prodomos* type, as we may call it, is found in the second city at Troy (Fig. 13), and on almost all sites where early Aegean remains have been discovered; it is the prototype of the Greek temple, and survived for this purpose into historic times, possibly through the influence of examples such as we find at Athens, where the house of Erechtheus was identical with

¹ *De Antidotis*, 13

the early temple of Athena.¹ At Tiryns and elsewhere we find this building of the prodomos type associated with the primitive features of the Greek house, but it is to be noted that the Hall or Megaron, with its prodomos, is merely an amplification of the pastas or a substitute for it; the primitive arrangement of court and surrounding chambers persists alike in the primitive Greek house, in the Mycenæan palace, and in the Greek house of historical times. The prodomos type does not seem to have persisted in domestic architecture; and after the Mycenæan age we find a reversion to the primitive type of court and pastas, which continues to be characteristic of the

Greek house throughout the times of Greek independence. About the second century before our era a custom seems to have begun of adding a second court to the first, for purposes of entertainment or of display. The custom may have originated in Rome, when Greek influence began to prevail among the wealthier classes; and, the primitive Italian house being nearly identical with the Greek in form, the result was a curious duplication of all essential features, such as we see at Pompei, the atrium and tablinum corresponding to the peristyle and prostas. We have no means of knowing whether there was a similar duplication in the Hellenistic mansion of the same period; it is perhaps improbable, as the second peristyle was designed especially for entertainments, and very likely varied considerably in arrangement and construction. But this excrescence should not blind us to the fact that the original court, which Vitruvius calls the gynæconitis, was always the same in its

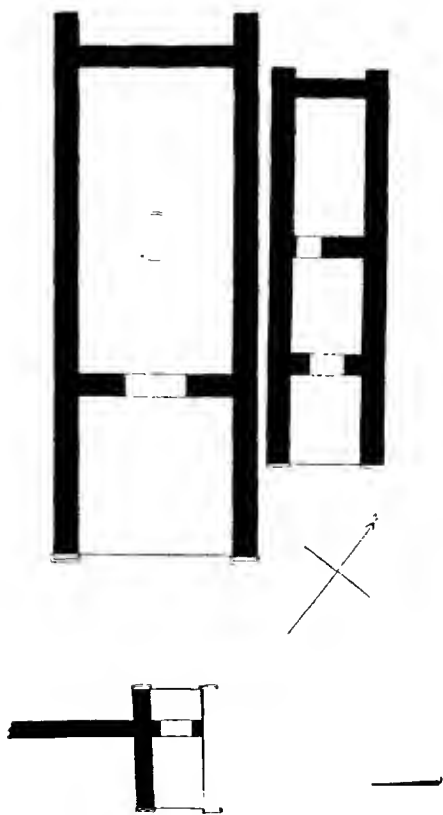


FIG. 13.—PALACE AT TROY.²

essential features, from the earliest to the latest time at which we can trace the existence of the Greek house. Nor is it to be wondered at that this single court was often regarded as especially belonging to the women. The

¹ The resemblance of the Hall and Court of Tiryns to the temple and temenos of later Greece is sometimes very remarkable. Cf. the temple of Zeus Soter, 'Excavations at Mega-

lopolis,' p. 58.

² A third building should be added on the left, corresponding exactly to the one on the right; see Dörpfeld, *Troja*, 1895, Pl. 1, II E.

life of a Greek man was always out-of-doors in free Greece, in the agora or the law courts or the palaestra; he practically only came home to sleep, or to dine and entertain his friends in the *ἀνδρῶν* that was reserved for the purpose. It was not until degenerate times that he sought in the luxury of private life a compensation for the loss of political freedom, and found it necessary to add to his house a separate court and suite of apartments for the use of himself and his guests.

ERNEST GARDNER.

GAVIN HAMILTON'S LETTERS TO CHARLES TOWNLEY.

It is a well-known fact that the Scottish painter Gavin Hamilton was the most active and successful of the band of excavators at work on Italian soil in the second half of the eighteenth century. He was employed by several collectors, notably by Charles Townley, and by Lord Shelburne, and, apart from his work as an artist, he carried on an active business in obtaining concessions of promising spots, and in the restoration and export of the proceeds of his excavations.

Until a recent date, our chief information with respect to Hamilton's diggings was derived from a summary, drawn up by Dallaway,¹ of Hamilton's letters to Townley. The original letters appear to be lost, and Prof. Michaelis² was unable to trace them, when he was investigating this subject. Other details, copied by Townley from the letters into his MS. inventories,³ have thence found their way into the *British Museum Marbles*, and other works on the Townley sculptures.

Much additional information was obtained when Hamilton's prolonged correspondence with Lord Shelburne was printed by Lord E. Fitzmaurice.⁴

The letters which are printed below are (with the exception of the last) copies of the letters to Townley, which were summarized by Dallaway. They are derived from a transcript of the letters, now in the Department of MSS.

¹ *Anecdotes of the Arts in England*, (1809), pp. 361-381.

² *Ancient Marbles in Great Britain*, p. 80.

³ Townley's Inventories, referred to below as the 1st and 2nd inventories, are both preserved in the Dept. of Greek and Roman Antiqs. of the Brit. Mus. The first inventory is a rough draft, in a brown paper cover, purchased and presented about 29 years ago, by the late Sir A. W. Franks. It must have been drawn up between 1785 and 1787. The latest date in the body of the document is 1785 (Relief, Heracles and Stag). On the other hand the catalogue does not include the sculptures purchased from the Villa Montalto in 1787, with one exception, the Cayatid, which is interpolated between Nos. 9 (Hecate) and 10 (Fortune). The second inventory, in two small quarto volumes, is dated 1804. Charles Townley died in January, 1805, and this was the official list of the collection as transferred to the Museum; it is signed at the end of the list of each room by

Messrs. E. Townley Standish, J. Planta, the then Principal Librarian, and Taylor Combe. This second list was the only authority available for Taylor Combe, Sir Henry Ellis, and Sir C. T. Newton. A third copy of the catalogue, in folio, shown by the watermark to be not older than 1804, was presented to the Museum by Mr. Spencer George Perceval, in 1891 (*Add. MS.* 34.009). It is independent of the 2nd inventory, but based on the same materials. See *The Academy*, Feb. 1885, p. 122. There is a fourth draft of a French catalogue, in the Greek and Roman Department, with more ample discussions, but no independent information.

⁴ *Academy*, 1878, Aug. 10, 17, 24, 31; Sept. 7. Privately reprinted in pamphlet form, *Devizes*, 1879. Again reprinted with some changes and additions, by me, in an Appendix to the privately printed edition of Michaelis's *Catalogue of Ancient Marbles at Lansdowne House* (London, 1889).

at the British Museum (Stowe MS. 1019), which, like the bulk of the Stowe collection, is derived from the library of Thomas Astle.¹ That Astle was one of Townley's most intimate friends may be inferred from Zoffany's engraved picture, in which he, with Charles Greville, whose name also occurs below, and d'Hancarville form the group of friends who are shown in Townley's house,² discussing the Clytie with the owner. The last letter is from an original (Stowe, 1020). As will be seen below, the transcript was made before the correspondence came to an end, and part of its conclusion must still be sought in Dallaway's summary. The first two letters were written in 1779, and describe the excavations of the preceding ten years. No doubt they were written in reply to a request from Townley for information as to the sculptures in his collection. They have not the same value, as contemporary evidence, as the letters to Lord Shelburne, but they cover more ground, and treat the subject from a rather different point of view.

A comparison of the letters with Dallaway's extracts shows that he has not often gone seriously wrong in his rendering. The process, however, of abbreviation and conversion into the third person has robbed the letters of most of their picturesqueness and vividness of detail.³

An Account of Ancient Marbles found by Mr. Gawin Hamilton in various
Places near Rome between 1769 and the Month of Nov^r 1779.

N.B. This acc^t was written by Mr. Hamilton himself to Mr. T[ownle]y.

IN THE YEAR 1769 I employed my Sculptor to go with another man to Villa Adriana in search of Marble to restore Statues. He was conducted to Pantanello, being the lowest ground belonging to that Villa and where antiently the Water that served the Villa was conducted, so as to pass under ground to the River. When he returned to Rome he told me he had found several fragments, heaped round the above Lake of Pantanello, many of which were of excellent Workmanship. His description raised my curiosity so much, that the day following I went with my Sculptor to visit this misterious spot. Upon enquiry I found that this place was the property of Sig^{nr} Luigi Lolli

¹ Thomas Astle, the palaeographer (1735-1803) bequeathed his collection of manuscripts to the Marquis of Buckingham, who placed it at Stowe. The whole collection was privately bought by the late Lord Ashburnham, in 1849, and the Stowe section of the Ashburnham library was bought for the British Museum in 1883. The book is inscribed 'Bibl. T. Astlei, 1780.'

² The room is the library, but the marbles have been changed according to the artist's fancy.

³ In this edition I have not touched the spelling. The punctuation, however, which (as in the letters to Lord Shelburne) consists mainly of commas, has been modified for the convenience of the reader.

and that it had been dug by his grandfather at a great expence and with some success; the precious fragments that were found at that time were sold to the Cardinal Polignac who transported them to France, and at his death I am told that the Antiquities were purchased by the King of Prussia.¹ The only thing of value that remained with the family was a Bust of Hadrian now in your Collection.² I endeavoured to know of different people at Tivoli if Lolli had finished his cava, or if part remained untouched. Various were the answers of those who knew nothing but by tradition, but nothing satisfactory could be learned.—In this dilemma I returned to Pantanello to look over my fragments, and take a survey of the Lake, surrounded on all sides with high ground, and no hopes left of draining it, but by a deep Channel, so as to carry off the water to the River Anio; my hopes were great, and nothing certain but the expence. Love for antiquity overbalanced every after concern. I then returned to Tivoli, made my bargain with Sig^{nr} Luigi Lolli, took chaise for Rome,—hastened out the best diggers I could get and set to work, cutting my drains through the vineyard of Sig^r Dominico de Angiolis³ where in some degree it had been made in the time of Lolli about 60 years ago. He insisted on having a sum of money, for leave to clean out this old drain. I thought his demand unreasonable, upon which an order was sent to my man not to proceed any farther. A law-suit commenced which lasted some months and which I at last gained in the Tribunal of the *Consulto*. I then got to work with my Aquilani who in a short time found a passage to an antient drain cut in the tufo. This happy event gave us courage in the hazardous enterprize, and after some weeks work underground by lamp-light and up to the knees in muddy water, we found an exit to the water of Pantanello, which tho' it was in a great measure drained, still my men were obliged to work past the knees in stinking mud, full of toads and Serpents and all kinds of vermin. A beginning of the Cava was made at the mouth of the drain, where formerly Lolli had planted his pump, which we found choaked up with trunks of trees and marble of all sorts, amongst which was discovered a Head now in the possession of Mr. Greville.⁴ This was followed by the vase of Peacocks and Fish now in the Museo Clementino.⁵ A fine Greyhound, a Ram's head and several fragments were afterwards discovered, when all of a sudden to our great mortification the rest appeared to have been dug by Lolli. This put a full stop to my career, and a council was held. In this interval I received a visit from Cav^r Piranesi of a Sunday morning. Providence sent him to hear mass at a Chapel belonging to the Conte Fede, the Priest was not ready, so that Piranesi, to fill up time, began a chat with an old

¹ Cardinal de Polignac died in 1742, and his sculptures are now in the Berlin Museum, but it seems impossible to distinguish those derived from the Pantanello. A certain number, e.g. 357, 359, 371-374 etc. agree in subject with those cited by Winnefeld (*Villa des Hadrian*, p. 161, in *Jahrb. des. Arch. Inst., Ergänzungsheft*, iii.) from Bulgarini, as having been excavated by Lolli in 1724, but I cannot establish their

identity.

² *Mus. Marbles*, x, pl. 8.

³ For Dominico de Angelis, cf. Winnefeld, *Villa des Hadrian*, p. 10.

⁴ Probably the Hon. Charles Greville. He appears as one of Townley's friends in the group by Zoffany, mentioned above.

⁵ Visconti, *Mus. Pio-Clementino*, vii, pl. 34.

man by name Centorubie, the only person alive that had been a witness to Lolli's excavations, and had been himself a digger. He was immediately conducted to my house at the Villa Michilli now the property of the Canonico Maderni. After the old gentleman was refreshed we sett out for Pantanello, and in our way heard the pleasing story of old times. A quarter of an hour brought us to the spot. Centorubie pointed out the space already dug by Lolli and what remained to be dug on this occasion, which was about two thirds of the whole; he added, that Lolli abandoned his enterprize merely on account of the great expenses that attended it, and on account of the difficulty of draining the Lake which he never compleated. This Story gave new light and new spirits to the depressed workmen, a butt of the Canonico's best wine was taken by assault, 40 Aquilani set to work, with two Corporals and a superintendant, two machines called Ciurni were got to throw out the Water that continued to gather in the lower part of this bottom. It is difficult to account for the contents of this place consisting of a vast number of trees cut down and thrown into this bottom, probably out of spite, as making part of some sacred wood or grove, intermixed with statues etc. etc, all which have shared the same fate. I observed that the Egyptian Idols had suffered most, being broke in minute peices, and disfigured on purpose; the Greek Sculptor in general has not so much incurred the hatred of primitive Christians and Barbarians. As to Busts and Portraits I found most of them had only suffered from the fall, when thrown into this reservoir of water and filth; what were thrown in first and that stuck in the mud, are the best preserved. Intermixed with the trees and statues, I found a vast quantity of white marble sufficient to build a lofty Pallace, a great number of columns of Alabaster much broke, as likewise of giallo antico and other precious Marble, to which I may add broken vases, basso-relievos, ornaments of all sorts, in a word a confused mixture of great part of the finest things of Hadrian's Villa. These were thrown promiscuously into this bottom, which by degrees had formed a small lake vulgarly called Pantanello, the diminutive of Pantano.

I shall now take notice of some of the principal things found in the cava of Pantanello as far as I can recollect.¹

In the Museo Clementino.

A Head of Menelaus, with other fragments belonging to the groupe of Menelaus defending the body of Patroclus²—Bust of a Philosopher, singular for it's high preservation—Head of a Plato—D^o in red marble—Head of a Mauritanian³—Bust of Hadrian⁴—Vase of Peacocks and Fish, &c.⁵—A Fragment, head of a Stag in red marble⁶—Head of a Goat—Head of a Ram

¹ Dallaway's copy (p. 367) agrees substantially with the present list, except for slight changes in the order.

² Winnefeld, p. 158; Helbig, *Fuhrer*, No. 238 etc.

³ Called elsewhere 'Juba as a Mauritanian.'

⁴ Winnefeld, p. 159.

⁵ Visconti, *Mus. Pio-Clem.* vii. pl. 34.

⁶ Winnefeld, p. 160; Visconti, *Mus. Pio-Clem.* vii. pl. 32, Fig. 1

—Small Statue of a Nem[es]is—Column with ornaments—A Stork, red marble—Antoninus Pius¹ and Greyhound.

At the Villa Albani.

A Sphinx of green basalto—Head of Antinous in the character of an Egyptian Idol—Busto of Caracalla and Head of D^o.—and Bust of Lucius Verus.

Earl of Shelburne.²

Statue of Cincinnatus³—Statue of Paris⁴—Group of Cupid and Psyche⁵—Two Egyptian Idols in black marble⁶—Basso relievos in black marble⁷—Fine Head of Antinous⁸—Head of ditto in the character of an Egyptian Idol⁹—Large Head of Minerva¹⁰—Head of Mercury¹¹—Head of Bacchus¹²—of Berenice¹³—Bust of a Conqueror at the Olympic games¹⁴—Fragment of a Statue supposed to be a Pudecizia¹⁵—and a Head of a Muse.¹⁶

Mr. Talbot.¹⁷

Bust of Hadrian¹⁸—D^o of Sabina¹⁹—Statue of Ptolemy.²⁰

Cav. (?) Piranesi.²¹

A great number of Fragments of Vases, Animals of different sorts, and some elegant ornaments and one Collosial head.

General Schowaloff.²²

A Head of Antinous—Head of Sabina, Bust of red marble of a young man crowned with olive, being part of a Statue as large as life.

¹ Winnefeld, p. 159; Visconti, *Mus. Pio-Clem.* vi. pl. 48 (the head only). The bust is antique, but does not belong.

² Dallaway (p. 368) omits the Minerva (see below), the Mercury (which, however, he assigns p. 313 to this site) and the Bacchus.

³ Michaelis, *Ancient Marbles in Great Britain* Lansdowne House, No. 85 [= Lansdowne House, No. 85, and so throughout].

⁴ Lansdowne House, No. 39.

⁵ Lansdowne House, No. 70.

⁶ Lansdowne House, No. 76a.

⁷ Lansdowne House, no. 76. *Mon. de l'Inst.* IV. pl. 29.

⁸ Lansdowne House, No. 61.

⁹ Lansdowne House, No. 38.

¹⁰ This must be the head, Lansdowne House, No. 93, hitherto attributed to Roma Vecchia, on the authority of Dallaway, p. 313.

¹¹ Lansdowne House, No. 88.

¹² Appears to be a confusion with No. 64 which in the Shelburne correspondence is called her 'Antinous in the character of Bacchus,'

or 'Bacchus.' The terminal figure (Lansdowne House, No. 91; Clarac, pl. 676, No. 1569) is assigned by Winnefeld (p. 158) to the Pantanello, and this is very possible, but it cannot be described as a 'head.'

¹³ Lansdowne House, No. 37.

¹⁴ Lansdowne House, No. 62.

¹⁵ Lansdowne House, No. 49.

¹⁶ Lansdowne House, No. 90.

¹⁷ Mr. Thomas Mansel-Talbot, of Margam.

¹⁸ Michaelis, Margam, No. 9.

¹⁹ Michaelis, Margam, No. 11.

²⁰ A youth, of the school of Pasiteles. Michaelis, Margam, No. 5.

²¹ Winnefeld, pp. 160-161, enumerates several ornamental works of the kind, which are engraved in Piranesi's works.

²² General Schuwalow was Grand Chamberlain of the Empress Catharine. The Antinous is now in the Hermitage, which, however, has two heads of Antinous, both ascribed to this site. Dietrichson, *Antinous*, pp. 256-257.

To Monsieur de Cock for Muscovie.

A Statue of a Cupid—Head of Juno, &c.

To Mr. Jenkins.

Bust of L. Verus¹—Head of Antinous—of Pompey—Lucilla—Juno—Atleto—Jupiter—Philosopher—Two Heads of Caracalla—Faustina giovine—and others which have escaped my memory. Above a dozen fine heads were sent to different parts of Germany.

I have only to add the fine head of a Greek Hero² now in your own possession, of which there is a similar one, though not of equal preservation at the Museo Clementino; this is all I can recollect of the principal things found in the Cava at Pantanello.³

SIR,

To proceed in good order, I must now say something of my next Cava in the tenuta of S. Gregorio then the property of Cardinal Ghigi, and commonly called Tor Colombaro.⁴ I began to dig in the year 1771, having in view two principal spots, one upon the Appian way, and the other about a quarter of a mile distant, the first supposed to be a Temple of Domitian, the latter a Villa of Galienus, which are described to be at nine miles from Rome.⁵ I found the Temple of Domitian strip'd of it's ornaments, remaining only a large red granate column, and a few pieces of Porphyry Columns, with some peices of Giallo-antico. This place had probably been ruined by Galienus to ornament his own Villa, for want of able artists in that low age. What confirms me in this conjecture is, the quantity of duplicate Statues found by me in this place, I may venture to say of all, and one always inferior to the other, consequently one original, the other a Copy of some inferior artist in the time of Galienus. In the ruins of this Villa I found that the precious Columns of Verd and Giall antique had been plundered by the primitive Christians, probably to ornament their Churches in that dark age; as to the Statues I found them much dispersed, as thrown aside either out of ignorance

¹ Dallaway (p. 370) adds 'purchased by Mr. L[yde] Browne, now at St. Petersburg.' Now at Pawlowsk. Winnefeld, p. 160.

² *Mus. Marbles*, ii. pl. 23. This remark, as given by Dallaway (p. 371) has given currency to an erroneous statement that there is an inferior replica also found at the Pantanello, in the Vatican (Ellis, *Townley Gallery*, ii. p. 18; Newton, *Græco-Roman Guide*, No. 139). See, however, Petersen, *Roem. Mittheilungen*, x. p. 133.

³ To Hamilton's list, lengthy as it is, we must add an Ephesian Artemis (Vise. *Mus. Pio-Clem.* i. pl. 31), a colossal head of Heracles (*Mus. Marbles*, i. pl. 12), and numerous other

works, assigned with more or less certainty to this site. (Cf. Winnefeld, pp. 158-161).

⁴ A full summary of the letter is given by Dallaway (p. 371). Hamilton's letter to Lord Shelburne of Jan. 1, 1772, was written while the excavation was in progress (*Lansdowne Catalogue*, p. 53).

⁵ It is known that Gallienus had his tomb at this point (Aurelius Victor, *Epit.* LX.), but there does not seem to be any evidence for the Villa, though the conjecture is approved by Canina (*Annali*, 1852, p. 300). The temple of Domitian is placed close to the tomb of Gallienus by Pratilli (*Delle Vm Appia*, p. 71, Naples, 1745), who may be Hamilton's authority.

or spite, some of them hardly one foot underground, and often broke by the Plough.

The first Statue of consequence that I found was the M. Aurelius¹ now at Shelburne House, considerably larger than life, and near it the duplicate broke in a thousand pieces, with the Head which I have placed on Lord Shelburne's Statue and which must have been the Head belonging to one of those two statues both of the same size and similar in every respect; the Sculptour is good tho' not of the first class. This Statue was followed by eight or ten smaller ones found on the same day, which being of middling workmanship and very much broke may be passed over as things little interesting to the curious. We shall therefore make haste to dig up the fine Meleagar² now a principal ornament to Shelburne House, and one of the finest things now in Great Britain. It is too well known to you and every person of the true antique taste to need my sounding it's praise, my business at present is to make a meer catalogue of things found to satisfy your curiosity and to refresh my own memory. A young Man on Horseback³ made next his appearance a good deal hurt by time, but very spirited; this was sold to Mr. Jenkins and [is] now the property of J. Smith Bary,⁴ Esq. The Discobolus⁵ was next brought to light in good preservation in all its parts tho' a little coroded by time. The attitude in particular you will allow is one of those happy productions of the antients which cannot be improved, and now calls the attention of the curious who visit the Museo Clementino, where likewise the Bust of Jupiter Serapis⁶ holds a distinguished place; this is the only peice of Sculptor of which I never found the duplicate. Mr. Corbet's Venus⁷ was found here which has great merit, as likewise a drap'd Venus, restored in the character of Venus Victrix⁸ and now in the possession of Mr. Bary; to which I may add a torso of Apollo, and a small Faun sitting, sent to Muscovy by Monsieur de Cock, one of the few to be ranked among those of refined taste. Lord Shelburne's Amazon⁹

¹ Hamilton was less explicit in his letter to Lord Shelburne. 'The head is its own, though wanting part of the neck, as I found it near where I found the statue, as likewise both the hands, though one of them is much corroded,' etc. Letter of March 4, 1773 (*Lansdowne Catalogue*, p. 65). Cf. Michaelis, *Lansdowne House*, No. 63.

² Hermes, *Lansdowne House*, No. 65.

³ Michaelis, *Marbury Hall*, No. 15. This figure is called by Dallaway "Paris Equestris," and by Clarea (v. pl. 810r, no. 202Sc) 'Amazone,' but Michaelis points out that the quasi-Phrygian costume occurs only in the restored portion. Hamilton wrote to Lord Shelburne. 'I have likewise sold him [Jenkins] a young figure with a Phrygian cap, on horseback, but considering it was so much fragmented, and well knowing what nice judges we

are in England in horse flesh, I declined sending it: I may add likewise on account of its small size and difficulty in placing it in the gallery.' Letter of Aug. 6, 1772, *Lansdowne Catalogue*, p. 58.

⁴ James Hugh Smith-Barry, of Marbury Hall.

⁵ The Discobolos of Naukydes (so-called). Visconti, *Mus. Pio-Clem.*, iii. pl. 26.

⁶ Serapis. Visconti, *Mus. Pio-Clem.*, vi. pl. 15.

⁷ Doubtless John Corbet, of Sundorne Castle, Shropshire (ob. 1817). Cf. Murray's Guide to Shropshire. '*Sundorne Castle* . . . In the drawing-room is a statue of Venus, brought from Rome, for which Nollekens is said to have offered a thousand pounds.'

⁸ Clarea, iv. pl. 594, no. 1449B; Michaelis, *Marbury Hall*, No. 6, 'Elektra.'

⁹ *Lansdowne House*, No. 83.

is likewise the fruit of the Colombaro. These are all that I can recollect that merit attention.

This finished, I was tempted to try my fortune at Porto, but neither Claudius nor Trajan favored my undertakings;¹ this done, I wandered about the Campagna of Rome for a whole winter without any success. Eight different Cavas were begun and finished without reaping the fruits of my labours, excepting Cornazano, an estate of the Prince Gabrielle where I found the Wolf, and small Naval Victory, now in the Museum.² Next year I made some researches at Albano where I found a fine Statue of a young Man without a head, now in the Museum, a Comedian the property of Cardinal Albani, &c.

During the process of my excavations at Albano³ I got acquainted with some people of property at Genzano, who pointed out to me some spots in that neighbourhood that deserved my attention. I found that the greatest part of them had been dug by the Cardinal Lancellotti. Monte Cagnolo alone answered my expectations. This is a small hill bewixt Gensano and Civitalavinia, commands a fine prospect towards Velletri and the sea, and from the magnificence of the ruins and other things found there, one must judge it to have been antiently part of the Villa of Antoninus Pius, which he built near the ancient Lavinium. This spot had been reduced in the lower age to a vineyard and consequently strip'd of its ornaments, some of which I found thrown promiscuously into one room about ten feet underground, and they were the following, viz., those in your own collection, the two young Fauns⁴ of exquisite Greek sculptor, and with the names of the artists in Greek, probably father and son; that of the father, though least entire, I think the most masterly performance. The Vase,⁵ which I found much broke, is restored with great attention, as the work deserves, being I think in point of general form and taste of Sculptor inferior to none extant. Your Group of a Bitch caressing a Dog⁶ is a masterpiece of its kind; the companion, being a Dog caressing a Bitch, is now much admired in the Museo Clementino.⁷ The two groups of Acteon devoured by his dogs⁸

¹ 'I have had a run of bad luck of late, particularly at the Ports of Trajan and Claudius, where I have found nothing.' Letter of Feb. 18, 1772, *Lansdowne Catalogue*, p. 56.

² i.e., in the Museo Pio-Clementino. For the Victory, cf. Clarac, iv. pl. 636, No. 1442; Helbig, No. 367.

³ In 1772. '... the third [Cava] is at Gensano, on the banks of the lake of Nemi. This I hope to conclude before I return to Rome, though it will cost me dear, as the proprietor is a rich man and not ignorant of the value of this spot.' Letter from Albano of September 30, 1772, *Lansdowne Catalogue*, p. 61.

⁴ 'I have just purchased a spot of land under Gensano, of the Capitolo of St. Peter's, where I hope to bring to light hidden treasures. It is a wood that has never been touched, full of

ruins and parts of broken columns of porphyry, &c., &c.' Letter from Rome of Sept. 12, 1773. *Lansdowne Catalogue*, p. 69.

⁴ The two Paniskî of Marcus Cossutius Cerdo. One only of the inscriptions describes the sculptor as freedman of Marcus, but there is no reason for supposing that there were two sculptors of the same name. *Mus. Marbles*, ii, pls. 33, 43.

⁵ Vase with Bacchanalian reliefs. *Mus. Marbles*, i, pl. 7.

⁶ *Mus. Marbles*, x, vignette.

⁷ In the Room of Animals at the Vatican (Helbig, i, 161; Reinach, *Répertoire de la Stat.*, ii, p. 759, Fig. 5).

⁸ Actæon and his dogs. (*Mus. Marbles*, ii, pl. 45). Hamilton only speaks of one group in the contemporary letter to Lord Shelburne

are both spirited figures, and to the best of my remembrance you are possessed of one of them. Two small Victory's Sacrificing a Bull¹ likewise fell to your share, being the best extant in relievo. Two other Dogs were found, which I believe are still the property of Mr. Jenkins, and it is somewhat particular that so many Dogs should be found in a place,² which still preserves the name of Monte Cagnolo, the property of the College of S. Buonaventura³; besides what I have already mentioned to be found in one room, I must not forget the Head or Bust of a young man, the character of a Meleagar,⁴ which was the first peice of Sculptor found on Monte Cagnolo, and which on account of its great preservation you thought would merit a place in your collection. The last and only large Statue found here was the Paris,⁵ which is now placed at Stowe by Lord Temple, with other fine Statues, in particular an Adonis of uncommon beauty, dug up at the Villa Fonseca one of my best Cavas.⁶ That of Nemi was not so successful, having found the place already dug; nevertheless I found that young Cupid holding a Vase⁷ which was purchased by Mr. Brown, and in some degree recompensed my trouble.

Ostia.⁸

Being desirous of trying my fortune somewhere near the sea, I agreed with Cardinal Surbelloni, then Bishop of that place, who granted me liberty

(Letter of Jan. 16, 1774, *Lansdowne Catalogue*, p. 70). On the other hand the summary list (p. 329 below) gives a second Actaeon as the property of Jenkins, and the third Townley Inventory says that the replica was purchased by Comte de D'Orsi of Normandy.'

¹ The two Victories on bulls in the Brit. Mus. *Mus. Marbles*, x, pls. 25, 26. They are composed to stand against a wall, but can hardly be said to be in relievo.

² A running greyhound (Massi, No. 169) and a statuette of a dog from this site (Helbig, i, No. 162) are in the Room of Animals at the Vatican. In the letter to Lord Shelburne, Hamilton speaks of a 'dog scratching his ear, and a bitch in the same attitude.'

³ In Townley's first MS. inventory he states that the Actaeon was found in the villa of Antoninus in the garden of the Cesarini. This is presumably an error.

⁴ I cannot certainly identify this head, which is not mentioned in the letter to Lord Shelburne. Compare p. 321: 'A Meleager with the Petina' (*see*). Can this be a corruption of Platanus? The term of Heracles (*Mus. Marbles*, ii, p. 46) is described as wearing the platanus (Add. MS. 34,999), and the word shows signs of correction. This head is said to have been found in 1776 or 1777 near Genzano, in grounds of the Cesarini.

⁵ Afterwards (and still?) at Hamilton Palace.

Michaelis, Hamilton Palace, No. 9; cf letters of Jan. 16 and May 1, 1774, *Lansdowne Catalogue*, pp. 70, 71.

Besides the sculptures here enumerated, Hamilton mentions in his letter to Lord Shelburne, 'parts of several very fine candelabri, but none as yet perfect . . . a small figure, a female Satyr playing on the pipe, a comedian [Mr. W. Ellis, cf. p. 320], several young boys, in particular a young Bacchus (*Mus. Marbles*, xi, pl. 38), and a boy laughing with a bird in his hands [Lord Clive, cf. p. 320], the same as the one at the Villa Borghese, but much finer and more entire. . . . A cupid.' *Lansdowne Catalogue*, p. 70. The first Townley inventory also assigns to this site 'an eagle, near the size of life,' which can only be the eagle (*Mus. Marbles*, x, pl. 58, Fig. 2) said in the second inventory to have been sent 'from Rome to the late Mr. Beaumont.' See also p. 320: 'A boy sitting with a goose . . . Mr. [Lyde] Brown[e]s.'

⁶ The Villa Fonseca, on the Caelian Hill, also gave the seated actor (*Mus. Marbles*, pl. 43, fig. 1).

⁷ Lyde Browne's collection was sold to the Empress Catharine II. (Dallaway, p. 389), and the Cupid is now at Pawlowsk (Reinach, *Répertoire*, ii, p. 437, Fig. 8).

⁸ The excavation at Ostia is attributed by Dallaway (p. 376) to 1792, but this is manifestly wrong. Cardinal Serbelloni only held the

to make some trials in that immense field of antiquity. I got as near the Sea as possible, judging it the most probable place to find objects of taste. We opened ground on a spot now called Porta Marina. From the figure of the ruins they proved to be the remains of publick *Thermae Maritinae*, and from the inscriptions which were found of an unusual size, it seems those Baths had been restored by different Emperors down to Constantin. I gave a very elegant one of the time of Trajan to Carlo Albagine,¹ but what gave me greatest hopes was to find some marks of my friend Hadrian, the great protectour of fine arts and in particular that of Sculptour. I did not remain long in suspense, for the first Statue that was brought to light was the fine Antinous² in the character of Abundance, perhaps the finest of that subject in the world. Mr. Bary tells me it is arrived safe at his house in England, and where I hope by this time you have had the pleasure to consider it. Near this Statue was found a very indifferent one of an Esculapius, and a large Statue of his daughter Hygea,³ very entire, and of a great deal of merit; this Statue was sold with some other peices of good Sculptour to the Langrave of Hesse Cassel. We found next a most excellent Torso under the knees, of which there is a duplicate at the Capitol⁴ restored by Mr. Le Gross, in the character of a Gladiator, but as this fragment is very imperfect, and a meer Torso, this able sculptor was led into a mistake of restoring it as a lying figure. N.B. The head is not its own, tho' commonly passes as such. After considering well this fine peice of antiquity, I determined on compleating it in the character of Dioned carrying off the Paladium, and as such recommended it to the E. of Shelburne.⁵ Little more of consequence was

See of Ostia between April, 1774, and Dec., 1775. This fact shows that the date 1772 proposed by Lord E. Fitzmaurice in correction of Dallaway (*Academy*, Aug. 10. 1878, p. 142) is too early, and the year 1771 (also given by Dallaway, p. 354) is still more so. In a third place Dallaway names the year 1778 (p. 312). The correct date is given by Hamilton's letters to Shelburne of May 1, 1774, and April 16, 1775.

¹ The records of inscriptions found by Hamilton are very imperfect (cf. *C.I.L.*, xiv, p. 1), and I do not trace the very elegant one of the time of Trajan. Carlo Albagine was a Roman dealer in marble tables and the like (*Lansdowne Catalogue*, p. 76), promoted by Dallaway (p. 377) to the rank of Cardinal. There is extant evidence that the baths were completed by Hadrian (*C.I.L.*, xiv, 98), and that they were restored at intervals down to the time of Valens, Gratian and Valentinian (*C.I.L.*, xiv, 134, 135, 137).

² Michaelis, Marbury Hall, No. 20.

³ This is no doubt the Hygieia at Cassel. Roscher, i, p. 2790; Reinach, *Répertoire*, ii, p. 298, Fig. 1.

⁴ Bottari, *Mus. Capitolino*, iii, pl. 69; Clarac, v, pl. 858A, No. 2212; Helbig, i, No. 413.

Hamilton is right in seeing the identity of type, each torso being in fact a fragment of a Myronian *Discobolos*. The restoration is elsewhere attributed to Momot.

⁵ Lansdowne House, No. 89. For the restoration see Clarac, v, pl. 829, Fig. 2085A. Hamilton wrote to Lord Shelburne, with reference to this singular invention, "I have never mentioned to your Lordship one of the finest things I have ever had in my possession, as I was not sure of getting a licence to send it out of Rome. Now that I have got it safe on board the *Felicea* for Leghorn, I have ventured to recommend it to your Lordship as something singular and uncommon. It is a *Dionede* carrying off the *Palladium*. . . The legs and arms are modern, but restored in perfect harmony with the rest. He holds the *Palladium* in one hand, while he defends himself with the right holding a dagger. Your Lordship will ask me why I suppose this statue to be a *Dionede*. I answer because it would be to the last degree absurd to suppose it any thing else, as I believe your Lordship will easily grant when you see it. Every view of it is fine, &c." Letter of March 25, 1776. *Lansdowne Catalogue*, p. 77.

found at Porta Marina, as I found that others had been there before me, so we proceeded to another Ruin on the sea shore, which from some fragments found above ground gave great hopes. A Bath was first discovered with the pavement of Verd antique and a fine Torso of a young man of which most of the other parts were found much broke, excepting the Head, notwithstanding the greatest diligence made for so interesting a discovery. The present Pope Pius VIth has ordered it to be restored for the Museum. Your small Venus holding a mirror¹ is another of the precious ornaments of this Bath; four of the Labours of Hercules² were found at some little distance from this place, which being very entire, and with their proper emblems, now add to the lustre of the Pope's Museum, to which I may add that tasty Tripod of Apollo,³ found near where we discovered your Mother of Venus⁴ and Muse,⁵ which, as they are in every respect two of my happiest discoveries, I am very happy that they should fall into so good hands as your own, especially as they make part of those select peices of art which I hope will in time establish a good taste in England.

During the time of the Mal Aria at Ostia, that is to say in the autumn and month of June, I used to employ my men at Roma Vecchia.⁶ This is an estate belonging to the Hospital of St John Lateran, consisting of about 500 acres of ground about 5 miles from Rome, upon the road to Albano and that of Frascati. A considerable ruin is seen near this last upon the right hand, and is generally believed to be the ruins of a Villa of Domitian's nurse. The fragments of Colossal Statues found near this ruin confirms me in this opinion, the excellent sculptour found in this place strengthens this supposition, among the most precious of which are your two fine Busts with the names—viz. the Decemvir,⁷ and companion,⁸ and the Mercury

¹ *Mus. Marbles*, II, pl. 22.

² Visconti, *Mus. Pio-Clem.*, II, pls. 5-8. Letter to Lord Shelburne of April 16, 1775. Helbig, on what authority I do not know, assigns these groups to the much later excavations of Fagan at Ostia (*Fuhrer*, I, No. 164). They are duly credited to Hamilton by Fea, *Vaggio ad Ostia* (1802), p. 43.

³ The punctuation leaves the destination of the tasty tripod uncertain, and Fea (*loc. cit.*), states that it went to England. Dallaway's summary here seems to go astray, 'Four of the Labours of Hercules . . . are now in the Mus. Pio-Clem., with the elegant Tripod Apollo' (*sic*), but I presume the tripod *Mus. Pio-Clem.*, VII, pl. 41, to be the one in question.

⁴ The 'Mother of Venus' is the Townley Venus (*Mus. Marbles*, I, pl. 8) which, strange as it seems, was not at once identified. Hamilton's interpretation was presumably known to Payne Knight, who calls the figure 'Venus or Dione' (*Specimens*, I, pl. 41). In Townley's inventories it is Libera or Ariadne.

⁵ *Mus. Marbles*, III, pl. 5.

⁶ Roma Vecchia is now identified with the Villa Quintiliana of Commodus, the scene of the death of Cleander.

⁷ *I.e.* the bust (*Mus. Marbles*, X, pl. 16), dedicated by the Decemviri. The first Townley inventory states that it was found by Gavin Hamilton at Roma Vecchia. The second inventory more cautiously says that it was found 'in an excavation made near Rome in 1776, the site of which must not as yet be mentioned.' Hence the conjecture (*Mus. Marbles*, X, pl. 16, text; Newton, *Græco-Roman Guide*, I, No. 22), that it was found in an illicit excavation at Rome.

⁸ *I.e.* the bust, dedicated by L. Aemilius Fortunatus (*Mus. Marbles*, X, pl. 15; *Græco-Roman Guide*, I, no. 91). This bust has hitherto been assigned to Genzano, on the authority of the second Townley inventory. The first Townley inventory, however, gives Roma Vecchia, and the letter to Lord Shelburne is conclusive, 'I must now say something relating to my late excavations at Roma Vecchia, four miles out of the Gate of St. John, where I have found

asleep,¹ to which I may add a basso relievo of Esculapius ² size of life, now in the collection of the Earl of Shelburne; last of all that uncommon Bacchante ³ now the property of the Hon^{ble}. Charles Greville. Your Basso relievo of the three Bacchante ⁴ was the last and one of the finest things found in this lucky spot.

Not to trouble you with a relation of the many Cavas which proved fruitless, such as that at Palo and the territory of Laricia, I shall now proceed to that of Castel di Guido, antiently called Lorium, and where the Emperor Antoninus Pius finished his days. This place belongs to the Hospital of S. Spirito, about 12 miles from Rome on the road to Civita Vecchia; we had hardly broke ground when an entire Statue of a Woman was found, with her head veiled and holding the Patera in one hand, and a Cornucopia in the other of middling workmanship, it seems to be a Pietas.⁵ This was followed by many other small Statues but of indifferent Sculptour, and much ruined excepting a small drapery figure representing a Domitia in the character of Diana, which went to the present Pope with the Pietas. In a large Vittina filled with earth was found a small Statue of a Cupid bending his Bow,⁶ being in the character of Cupid conqueror of Hero's, as is expressed by the Lion's skin on the Trunk, alluding to the spoils of Hercules. This was too precious a Jewel not to finish in your Cabinet, it is by much the finest of that subject extant, and singular for having the Hand holding the Bow, which all the others want. There is nothing perhaps more obvious in Antiquity, and from the many repetitions one must judge it a favourite of the Antients, and reduced to that degree of perfection, as to be past improvement. Enjoy it therefore, my dear Friend, with the many fine things I have sent you, in spite of the sneers of a tasteless age, and never forget that the most valuable acquisition a man of refined taste can make, is a peice of fine Greek Sculptour.—Addio.

Here the transcript terminates, and we are again thrown on Dallaway's summary, evidently taken from the correspondence at a later date. After mentioning the Cupid, he continues (p. 380) as follows:—

two entire busts, one of a Decemvir, the other of L. Aemilius Fortunatus, as appears from the inscription on the pieduccio.' Letter of Feb. 9, 1775. *Lansdowne Catalogue*, p. 72.

¹ Endymion. *Mus. Marbles*, xi. pl. 43.

² Lansdowne House, No. 2.

³ *I.e.* the Ariadne of the Townley Collection, *Mus. Marbles*, x. pl. 23. Cf. Dallaway, p. 379, 'the singularly beautiful Bacchante, once the property of the Honourable Charles Greville, now Mr. Townley.'

⁴ *Mus. Marbles*, ii. pl. 12. The Townley inventories assign this relief to Gabii (or Castiglione), but Hamilton's own statement seems to supersede that of Townley (cf. Dallaway, p. 335, from the inventory, and p. 379, from the letter). There is no evidence to think he was

at Gabii until 1792. On the other hand there is a curious indication of confusion in the entry as given in Add. MS. 34,009, 'Found 1775 in ruins near Castiglione, the country of the Gabii, five miles from St. John's Gate, on the road to Frascati from Rome,' that is on the site of Roma Vecchia. This authority also assigns the small Fortuna (*Mus. Marbles*, ii. pl. 13) to Roma Vecchia.

⁵ The type appears to be that of the Concordia in the Torlonia Collection (Clarac, iii, pl. 452, no. 828) which is said to have come from Cavaceppi (P. E. Visconti, *Musco Torlonia*, no. 208). I have not recognised it in the Museo Pio-Clementino.

⁶ *Mus. Marbles*, x. pl. 21.

'Mr. H. discovered a Pericles at the *Oliveto of Tivoli* (now Mr. Townley's),¹ a repetition of that in the Mus. Pio-Clem. found at the *Lake of Castiglione*, with the helmet.'²

Dallaway then proceeds to give some account of the excavations at Gabii which he wrongly dates 1780, but we are able to continue with an autograph letter of Gavin Hamilton's, which is in the MS. Stowe, 1020, also derived from the library of Thomas Astle. The letter is not addressed, but was probably written like the rest, to Charles Townley. I have reproduced here the exact punctuation, as well as the spelling and Latinity of the author, since there is no question of error as in the case of the transcript.

ROME, 18th June 1792.³

Dear Sir

I am just got up after an Ague of 3 Weeks and somewhat weak, nevertheless I cannot help putting pen to paper and to give you some account of my proceedings at the Cava of Gabio, the exact spot of which is now decided by the interesting inscriptions I found in that place, to the great joy of all the antiquarians here my good fortune began with the discovery of the two fine busts of Septimius Severus and Geta. I next got into the publick place ornamented with a portico, pedestals and statues of the Decurioni and other magistrates of the Gabini, with the inscriptions on the pedestals, what offered next was a very large architrave and frieze with a very long and curious inscription⁴ on it signifying that the palace was built by Polycarpus to the memory of Domitia daughter of Domitius Corbulo, there is likewise the donation of this palace with all the statues and other valuable things to the city of Gabio but on certain conditions, I have found fragments of at least two hundred statues, but so mutilated that I have only been able to save 22 statues that are good and worthy restoring besides other curious things of different kinds and small statues heads &c. I have three statues in armour all Imperial that go much beyond any thing of the kind hitherto seen, a drapery figure of a woman uncommonly fine, a statue of Claudius and one of Germanicus in fine preservation, a statue of Diana quite new and very fine in particular the head, but what you would have coveted most is a small bust of Marcus Agrippa size of life, the finest extant. All these fine things go to the Prince Borghese who builds a place for their reception at the Villa, with the title of the Museo Gabino, and his resolution is much applauded by the publick, I must now tell you that the city of Gabio was just half way from

¹ Brit. Mus. No. 549.

² Visconti, *Mus. Pio-Clem.*, vi pl. 29. According to Visconti (l.c.) the two terminal busts of Pericles were found together at Tivoli. It is unfortunate that Hamilton's own account here fails us.

³ The year has been filled in.

⁴ Visconti, *Mon. Gabini*, pl. 17. The inscription runs '*In honorem memoriae domus Domitiae Augustae Cn. Domiti Corbulonis fil.*' etc.

Rome to Palestrino near the Gate of Castiglione, in the Tenuta di Pantano di Borghese.¹

Now my dear Sir I am a little tired, and my Cavatore is come in with good news from the new Cava so I must finish by assuring you that I am at all times your

Most faithful humble Servant

G. J. HAMILTON

A summary of the results is annexed to the transcript of the letters. It is not clear by whom it was drawn up. The information given is for the most part the same as that given in the letters, but it is not entirely based on them. I print here, however, a draft in the Manuscript volume, Stowe, 1020, from which the list in Stowe, 1019 is clearly copied, with such abbreviations as are made necessary by a smaller sized paper. After this list the volume concludes with general remarks on the Marcus Aurelius, here said to be in Astle's possession.

Ancient Marbles found by Mr. Gavin Hamilton in various Ruins near Rome since 1769.

	<i>Statues.</i>	<i>The Possessors.</i>
Found in the Pantanello Lolli's ground in Hadrian's Villa Tivoli. 1769.	A Nemesis 4 feet high	Mus Clementinum.
	A Theseus ² putting on his sandal . . .	Lord Shelburn.
	A Paris	Ditto.
	A Groupe of Cupid and Psyche	Do
	An O-ris in Paragon	Do
	An Isidis ³ Ditto .. .	Do
	A Ptolemy	Mr. Talbot.
Tor di Colom baro. 9 miles from Rome on the Fras- cati Road	A Cupid	Mr. Cock, Petersburg.
	Mar. Aurelius Colossicon	Ld. Shelburn.
	A Dr. ⁴ Bad	[Mr. Astle.]
	Equestrian of Paris. Small Life	Mr. Barry.
	Apollo. Small Life .. .	Mr. Cock.
	A Discobolus	Mus Clementinum.
	A Venus	Mr. Corbet.
	Venus Draped	Mr. Barry.
	A Faun. Small	Mr. Cock.
	An Amazon	Lord Shelburn.

¹ The valuable proceeds of the last excavation, which were described by Visconti (*Monumenti Gabini della Villa Pinciana*) are now in the Louvre. Visconti (*l.c.* p. 6) says that Prince Marino Antonio Borghese was moved 'd'animare con nobili condizien i tentativi che il celebre pittore scozzese sig. Gavino Hamilton, solertissimo ed indefesso creatore d'antichità, desiderava fare nell'ampio tenitorio, detto appunto dal vicin lago, Pantan de' Griffi, etc.' This lake or swamp was an old volcanic crater,

and has since been drained. The Diana is the well known Diana of Gabii (Visconti, *l.c.* pl. 12, Fig. 32). For the Agrippa see Visconti, *l.c.* pl. 3, Figs. 2 and 2a.

² Or 'Cincinnatus.'

³ *Sic.* Perhaps 'An Isis in Ditto.'

⁴ In the draft Stowe, 1020, no name of an owner is given, but the bust is described as 'Bad.' The epithet has been inserted and erased, and the owner's name has been inserted in Stowe, 1019.

		<i>Statues.</i>	<i>The Possessors.</i>
Cornazana		A Small Naval Victory	Mus Clementinum.
Albano	{	A Young Man restored as Aelius Caes.	D ^o .
		A Scenic Figure	Card. Albani.
Monte Cagnolo	{	A Faun 4 feet with Greek Inscription	Mr. Townley.
betwixt Gen-		A D ^o . with D ^o	D ^o .
zano & Lanu-		Groupe of a Bitch caressing a Dog.	D ^o .
vinum part		A groupe of Actæon seiz'd by 2 Dogs	D ^o .
of Ant. Pius's		A D ^o	Mr. Jenkins
Villa		Groupe of a Dog caressing a Bitch	M. Clementinum.
	{	A Boy sitting with a Goose	Mr. Brown's
		A Boy with a Bird	Lord Clive
		A Scenic Figure. Small.	Mr. Welbore Ellis.
Monte		A Dog scratching his Ear.	Mr. Jenkins.
Cagnolo	{	A D ^o . D ^o	D ^o .
		A Groupe of Genii sacrificing a Bull. Small	Mr. Townley.
		A D ^o . D ^o	D ^o .
		A Paris presenting the Apple. Large	Lord Temple's, Stow.
Nemi		A Cupid holding a Scollop Shell	Mr. Brown.
	{	Antinous with the Cornu-Copia. large life	Mr. Bary.
		Au Esculapius. Bad.	
		Igacia. Large life	Landgrave of Hesse
		Au Athlette	Mus. Clementin ^m .
		A Diomedes	Lord Shelburn.
Ostia	{	A Venus. 4 feet 6 in.	Mr. Townley.
		The Nymph Dionea	D ^o .
		Thalia. Pastoral Muse	D ^o .
		Hercules with the Cerberus	M. Clementinum.
		D ^o . fighting the Hydra	D ^o .
		D ^o . killing	D ^o .
		D ^o . Carrying the Bull	D ^o .
Roma Vecchia	{	An Adonis asleep	Mr. Townley
5 Miles		A Bacchante with the Tygre	Mr. Greville
from Rome		A Pietas with the Patera and Veiled	Mus Clementinum.
		Domitia in Character of Diana. small life.	D ^o .
		Cupid of Thespis ¹ with the Bow. Small.	Mr. Townley.
		Five others ruined.	

Busts.

Villa Hadriani Pantanella	{	A Philosopher, unknown	M. Clementinum
		Hadrian	D ^o .
		Caracalla	Card. A(l)bani
		L. Verus	D ^o .
		Minerva	Lord Shelburn
		Hadrian	Mr. Mansel Talbot
Tor di Colomba ro	{	Sabina	D ^o .
		L. Verus	Mr. Lyde Brown
		Jupiter Serapis	M. Clementinum
		A Young Decemvir with an inscription	Mr. Townley.
		Of L. Æmil: Fortunatus. So inscribed	D ^o .

¹ Thespiae.

	<i>Heads</i>	<i>The Possessors.</i>
	An Athlette	Mr. Greville
	Menelaus. Belonged to a Groupe	M. Clementinum
	Plato Supposed	D ^o .
	Head in Red Marble	D ^o .
	Antinous in Character of Osiris	Carl. Albani
Villa	Juba as a Mauritanian	M. Clementinum.
Hadriani	Ant. Pius .	D ^o .
in the	Caracalla .	D ^o .
Pantinel-	Antinous with a Vine Wreath	Lord Shelburn
la	D ^o . in Character of Osiris	D ^o .
	Mercury	D ^o .
	Bacchus	D ^o .
	Berenice	D ^o .
	Athlette with a wreath	D ^o .
	Muse .	D ^o .
	Juno	Mr. Cock. Petersburg
	Antinous	Duke of Dorset.
	Pompey	D ^o .
	Lucilla .	Jenkins
	Juno .	D ^o .
	Jupiter	D ^o .
D ^o	Philosopher unknown	D ^o .
	Caracalla	D ^o .
	D ^o	D ^o .
	Faustina Jun ^r .	D ^o .
	Diomedes	Mr. Townley.
	D ^o .	M. Clementinum
	Hercules Colossal .	Mr. Townley
	Seven sent to Germany	
Monte	A Meleager with the Petina ¹	Mr. Townley
Cagnola		

Miscellanies.

In the Pantanella a Vase with Peacocks, D^o. with Fish,² a Ram's head, a Grey hound, a Stag's head Red Marble, an Ibis in D^o. plac'd in the Museum Clementinum.

A Sphinx in green Basalte at Carl. Albani's, a black Bas relief ³ at Lord Shelburn's, at Canazano a Wolf, in the Mus. Clementinum—A Vase with Bacchanatians found at Monte Cagnola, at Mr. Townley's, a Bass Relief of Calchas Priest of Apollo found with the Bacchanatians at Roma Vecchia.

A. H. SMITH.

¹ See p. 311. ² There was only one vase—see above, p. 309. ³ Lansdowne House, No. 76

Arapison to Kir-sheher (Mocissos). Just beyond the village the road runs by the base of a hill, rising to the height of 380 feet above it, which bears clear traces of an ancient fortress. Round the summit of this hill runs a wall of sheer rock, unbroken except to some extent on the west side and more especially on the north, where there are considerable remains of a wall built of irregular, rough stones laid on each other, with smaller stones filling up the interstices. On the east side, below what was apparently the gateway, there is an underground passage, now blocked up, which possibly led down to a well, like the underground staircases at Anasia and Karalar (in Galatia), which lead down to a water-supply in the heart of the mountain (*J.H.S.* 1899, p. 55 f.); and on a shelf of rock on the left of the gateway our inscription is engraved. A glance at the map is sufficient to show the importance of the situation of this fortress, which commands the direct road between Pteria (Boghaz Keui), Tyana (Kizli Hissar), and the Cilician Gates. Near the line of this road there are doubtless other remains of the "Hittite" period to be found: only the other day we heard a report of a new inscription not far from Bulgar Ma'den.

Our inscription (which is incised, not cut in relief) must be of a comparatively late date, but it is of no small interest as showing a very advanced stage in the development towards purely linear forms. It is evidently written *homotrophedon*. The surface of the rock was not carefully smoothed (hence it is not possible to obtain a good impression) and the engraver seems to have gone to work without a proper calculation of the space required, so that part (*B*) of the lowest band had to be engraved, for want of room, outside the limit of the upper bands. It should follow at the left-hand end of the lowest band, but in the illustration is placed below, owing to exigencies of space. The inscription is not in as good a state of preservation as could be wished: the symbols were to a large extent covered over with an encrustation of lichen, which had to be removed before they could be deciphered, and in one or two parts they are so much worn away as to be altogether illegible. I first made a careful copy, then took a squeeze, and afterwards revised and improved the copy. The impression turned out better than I had ventured to hope, and I have made the drawing directly from it, using the copy to help out or to confirm the reading. The scale of the illustration is about $\frac{2}{5}$ of the original. I am indebted to Mr. A. E. Cowley of the Bodleian Library for carefully comparing my drawing with the impression and suggesting some important improvements.

J. G. C. ANDERSON.

THE Σχῆμα Τριαίτης IN THE ERECHTHEION.

THE two cultus monuments whose existence is bound up with the solid rock on which the Erechtheion stands have always been eagerly sought for in the hope that they might be used as fixed points from which to determine the complicated plan of the temple.

Perhaps the 'salt spring' has attracted less attention than the 'trident-mark.' Boetticher¹ supposed it to lie at the lowest part of the middle chamber, where a hollow in the rock, communicating with a still deeper cleft, even now collects water after a shower. As Pausanias states that the 'spring' was ἔνδον this is perhaps the most likely spot, unless we prefer to locate it in the West Hall, and to suppose that it was destroyed when the cistern was built.² It is true that J. Fergusson³ placed the 'spring' in the north-west angle of the West Cella, but this is quite an arbitrary hypothesis, and appears untenable, because the rock has here a fall towards the outside through the opening which pierces the north wall and leads into the crypt under the north porch. It is to be remarked in passing that to call the θάλασσα Ἐρεχθίς a 'spring' is a mistake. No colour for this rendering is given by the literary evidence, where φρέαρ or θάλασσα occurs, and it is geologically impossible that there should be a spring at this spot. It is well known that springs on the Acropolis appear only where the limestone rests on the clay schist. There is nothing here but the surface of the rock. It was therefore probably only a well, and possibly even only a cistern,⁴ for which divine origin was claimed.

Tétaz supposed he had discovered the marks of the god's trident. The opening (about 1 m. 31 square) in the floor of the north porch has long been known. Borrmann⁵ regards it as undoubtedly antique. Below this opening the rock is rough, showing a few small clefts and holes (the best illustration is in the Praktika,⁶ Pl. 3). There are three small holes lying on a curve, and a fourth, larger and more irregular, at a greater distance from the others. It has been supposed that the trident-mark is to be found among these. This hypothesis has been vigorously controverted, especially by Boetticher (*loc. cit.* p. 192), but his criticism found few adherents because it was con-

¹ C. Boetticher, *Untersuchungen auf der Akropolis*, p. 196.

² A. S. Cooley, *Amer. Journal of Archaeology*, iii. (1899), p. 392.

³ J. Fergusson, *Transact. of the R. Inst. of Brit. Architects*, 1875-6.

⁴ J. G. Frazer, *Pausanias*, vol. ii p. 336.

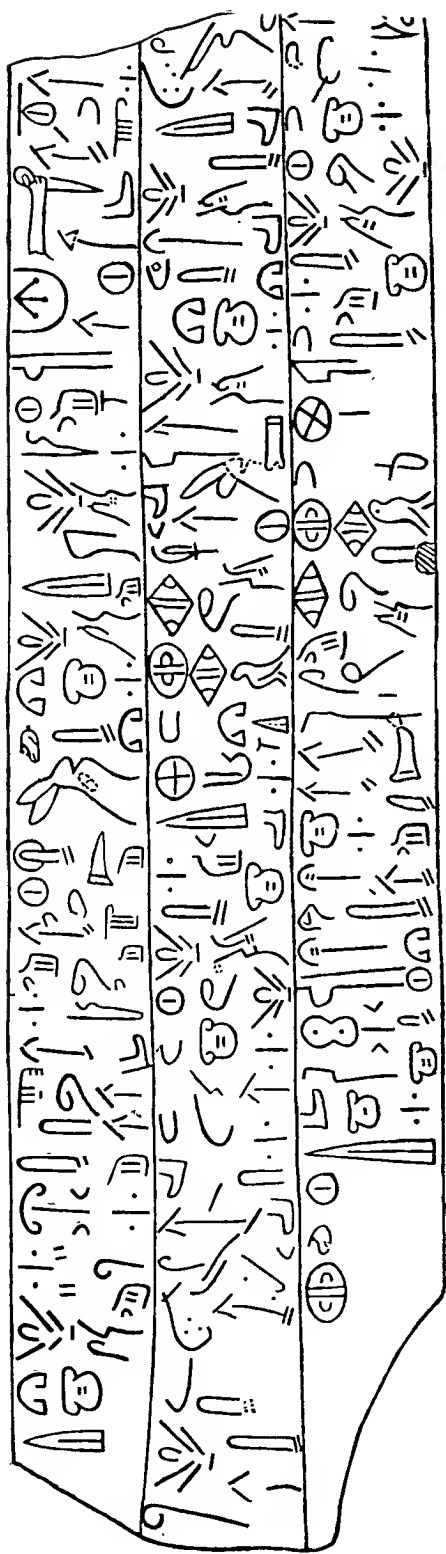
⁵ *Athen. Mittheil.*, vi. p. 381.

⁶ Πρακτικά τῆς ἐπὶ τοῦ Ἐρεχθείου ἐπιτροπῆς. Athens, 1853. German translation in Thiersch's *Epikrisis*. (*Abhandl. d. bayr. Akad. d. Wiss* i. Cl. viii. Bd. ii. Abth., München, 1857)

A NEW HITTITE INSCRIPTION.

THE discovery of a new "Hittite" inscription was one of the more solid results of a short and too hurried journey in Asia Minor which I made with Mr. J. W. Crowfoot during July and August of last year, and its publication may not be inopportune at a moment when fresh interest has been aroused in this species of script by the discoveries of Mr. Arthur Evans in Crete.

After a rather abortive attempt to re-explore the obscure and rugged borderland between Lycaonia and Pamphylia, the net result of which was the discovery of just enough to make the topography of this dark corner even less intelligible than before, we turned towards Cappadocia, where we had hopes of finding at least some pre-Hellenic monuments. Years ago Professor Ramsay and Mr. Hogarth had heard a report of what was presumably a Hittite inscription near Nev-sheher (Soandos), a town two days' journey west of Caesarea Mazaca: important things were said to have turned up near the latter city since M. Chantre's visit: and we learnt also of the existence of hieroglyphic stones at Arapison (Zoropassos) on the Halys. At Nev-sheher we parted company for a time, Mr. Crowfoot going to Caesarea on what turned out to be a fruitless quest, while I descended into the valley of the Halys. At Arapison I had no luck, but another traveller may be more fortunate. Apparently there had been two Hittite stones in the town, which had been found at a neighbouring village and were held in private possession. Unfortunately one of them had recently been seized by the authorities for transport to Constantinople (that it has arrived there it would be rash to conclude); the other I believe is still in the town, but nothing would induce the owner to admit that he now possessed it: it had been taken from him, he said. So far fortune did not smile upon me, but further inquiries elicited the information that there was not far off a "written rock" with wonderful characters inscribed on it, which more than one enlightened *hadjî* had failed to interpret. My hopes rose and we rode away towards Tuz Keui to see it. Slowly and laboriously we dragged our horses and ourselves up a projecting rocky ridge to find on the summit a wretched Christian graffito! With unspeakable mortification we trudged down to Tuz Keui amid a blinding dust-storm, which made the misery of that day complete. Next morning we fared better. Still another written rock was reported at a village two hours away on the opposite side of the Halys, and with chastened expectations we set out to examine it. About 6 miles or 10 kilometres N.N.W. of Tuz Keui, on the brow of the ridge which slopes gently up from the river, lies the little village of Karaburua on the direct road from Nev-sheher viâ



A



B

HITTITE INSCRIPTION FROM KARABUTNA.

sidered too rationalistic; believers often see what is hidden from others! Borrmann (*loc. cit.*) states the possibility in words which sharply define the question at issue: "Since, therefore, the existence of an opening in the stereobate of about 1m. 31 square is proved, there can be no reason to doubt that a relation subsists between this opening and the apartment or space under it which was accessible from inside, and the question of the identity of the cracks in the rock with Poseidon's marks gains significance." Others have expressed the same view with even greater decision (*e.g.*, Furtwängler, *Meisterwerke*, p. 195), and Boetticher's contrary opinion seems to be almost forgotten.

There are, however, other reasons which make strongly against the identification of these holes with the trident-mark. The chief reason why it is supposed to be here is that the opening in the floor of the north porch was evidently planned on purpose to make it possible to look down and see what was below; but only *two* of the holes in question lie exactly under the opening. We must assume a border to the opening (Dörpfeld suggests an altar), and this would make it still more difficult to see the third hole. Again, the three holes do not accurately correspond to punctures made by a trident, for they are set on a curve and at unequal distances from each other.

All this might be waived as inconclusive were it not that the philological evidence is strongly against the common view. Pausanias (I, 26, 6) speaks of a *σχῆμα τριάλνης*; "the form of a trident." Now three holes do not reproduce the *form* (*σχῆμα*) of a trident; they can at most give the *mark* or *trace* (*σῆμα*) of a trident. If then we accept the holes under the north porch as the Poseidon mark we must adopt Götting's reading '*σῆμα*,' instead of the usual reading "*σχῆμα*," which is otherwise beyond suspicion. The passage of Hegesias (Strabo IX, p. 396), *τὸ περιττῆς τριάλνης ἐκείθι σημεῖον* (*symbol*), is no argument for the change. The mark could be called a *sign* (*σημεῖον*), whether it was in the actual form of a trident or merely consisted of three punctures. If a scribe erroneously wrote *σχῆμα* for *σῆμα* he substituted a longer and more significant word for a shorter and less significant one. Manuscript mistakes are usually made in an opposite sense, *i.e.*, a less significant word is introduced. Hence we ought to have very strong reasons before correcting *σχῆμα* (as it stands) to *σῆμα*; in fact the presence of such an error here would seem almost inconceivable.

Retaining then the reading *σχῆμα* as beyond suspicion, we must reject the identification of the trident mark with the three holes in question, and we shall be the more amply justified in doing so if we can point out anywhere else marks in the living rock which have the actual *form* of a trident. Such a monument exists in the corner between the west transverse wall and the (more recent) north long wall, just in front of the so-called 'postern' in the north wall. The accompanying illustrations are reproductions from photographs, but unfortunately the monument itself cannot be well photographed because of the confined space.¹ The wall which appears in the upper

¹ The details have therefore been slightly strengthened in the reproduction.—EDD.

left-hand corner of Fig. 1 is the old west transverse wall. Inasmuch as the picture must be taken from above, the middle prong (*b*) does not appear distinctly in the print, yet in the rock it is quite deep and clear, though broader and shallower than the two outer prongs (*a*, *c*). The two outer prongs of the trident (*a*, *c*) are easily recognised. They are slightly curved, about 60 cm. long and 30 cm. deep, but shallower towards the points. Between these two is the middle prong (*b*), somewhat shallower than the others, a little shorter, not curved, and having a broader base at the point of attachment. The three prongs are connected with each other by a deep cleft representing the cross-bar. This cleft is small and narrow, but very deep, and is continued beyond the prongs on the east side. The continuation however, as the photograph shows, does not much affect the general design. We have here a real σχήμα τριάνης, and Pausanias' use of the word



FIG. 1.

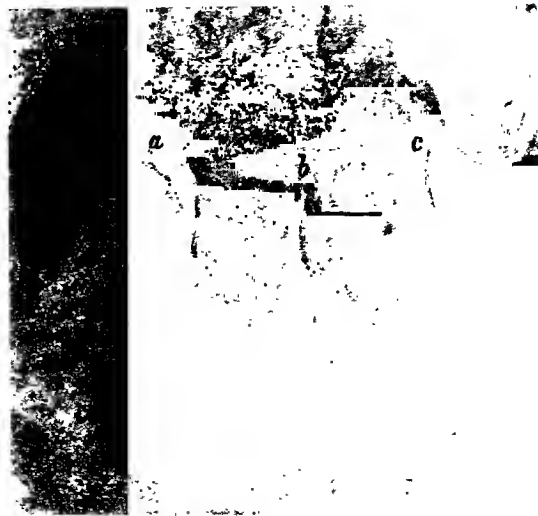


FIG. 2.

σχήμα,¹ accurately corresponding to fact, is a fresh proof of his being an eyewitness.

Again, Petersen² has laid stress on the point that the trident symbol is more suitably placed inside the sanctuary than outside; and it is quite allowable, though not absolutely necessary, to apply the word ἔνδον not only to the salt-well but also to the σχήμα, which occurs after the parenthesis. The θάλασσα and the σχήμα were closely related and are mentioned together.

¹ Boetticher (*Untersuchungen*, p. 194 ff.) maintained that the rock foundation in the central space had been purposely hewn away. This is however not the case. To avoid arguing

solely from appearances, I may refer to Borrmann, *Athen. Mitth.* vi. p. 382 ff.

² *Athen. Mitth.* x. p. 3.

The purpose served by the crypt under the north porch and by the passage leading from it to the interior of the temple is difficult to determine. Even on the hypothesis that the crypt contains the trident-marks, its size and shape make it impossible to suppose that this could have been its only use. For the crypt has a kind of vestibule, a quadrangular intermediate chamber (as shewn in the *Praktika*, § 25) between it and the passage. The shape of the vestibule was evidently chosen for some definite reason. A massive slab of marble forms the roof, and a large block of poros stone, which projected from the interior into the vestibule, has been cut out to make more room.

The existence of the passage has usually been accounted for by supposing that it was intended as a second approach to the trident monument, and it has been called a 'door' or a 'postern.' It cannot, however, have been meant to serve as a real door-way for human beings, even on rare occasions. For its height (1 m. 22) is quite insufficient,¹ and besides it is built in a very careless style. Blocks of marble are certainly used, but only for the sake of solidity, not because they were meant to be seen. Of the two blocks at the left side (looking from the exterior) the lower is quite rough and the upper is smoothed; while of the three blocks at the right side the middle one is smoothed and the upper and lower are rough. Indeed it appears that old blocks were used up in the buildings, for otherwise it is impossible to explain the differences in workmanship. The lower block on the left side was evidently not made for the place it occupies; its rough surface is turned outwards, and at the lower edge of this surface is an old clamp-hole, and on the upper surface, which is smoothed, and a strip of which is left free by the superposed block, there is an old mortise-hole.

Towards the exterior the passage widens and becomes the vestibule already mentioned.² The corner of the vestibule next to the blocks of the passage does not form a straight edge, for the stones here are put together in a complicated and irregular way. The blocks of the vestibule are of poros, and here, too, old material seems to have been employed, for one of the two lower stones on the left has an edge worked for fitting, and the other has not.

The great marble slab forming the roof of the vestibule has an almost semicircular hole (25 × 12.5 cm.) at the edge next the temple wall. Julius³ supposes this hole to be antique, giving as his reason that the way it is wrought shews the hole to have been made before the stone was placed in position, and he thinks its purpose was to give air and light to the space below the slab. But the *Praktika* (§ 25) most decidedly pronounce it modern. 'This slab has . . . a runnel which used to convey the water from above into the cavity of the vault. The runnel is modern, and so also is

¹ This is the height of the left side. The right side goes deeper (1 m. 66), but of course the left side is the one to reckon by, as in the *Praktika*.

² See the illustration in the *Praktika*, Pl. 3, 2. Jahn-Michaelis, *Pausaniæ descr. arcis*, Pl. VI. C.

³ L. Julius, *Das Erechtheion*, p. 25

an opening in the temple wall just over the runnel placed so as to shoot the water into it.' Relying on this definite information, and considering besides the careless style of work which in my opinion makes it possible to suppose that the hole was pierced after the slab was in position, we must conclude that the runnel is of later date than the structure. We may note in addition that an opening for light would more naturally have been pierced in the middle of the passage, than, as here, on the right side.

As to the crypt proper and the modern breach through the eastern foundation of the north porch, I have nothing to add to what is known.

These facts cannot be explained merely by supposing the trident-mark to be situated under the north porch. This explanation has been felt to be unsatisfactory, and accordingly others have been suggested. Fowler's¹ idea that the sacred snake lived in the crypt is attractive, for we have to find accommodation for the snake somewhere in the Erechtheion. The ἐπιμήνια (Herod. VIII. 41) might be offered through the opening, and from time to time the pious visitor would catch a glimpse of the genius of the Citadel.

Two more points must be noticed which help to clear up the question. It is necessary to assume the existence of an opening in the floor of the West Cella. Through this opening Pausanias, like other visitors, would see the σχῆμα τριαίνης below on the solid rock. It must have been quite dark in the cella and still darker in the crypt, but the σχῆμα receives some light from the passage in the north wall, which is just opposite. It is, therefore, evident why the passage was made with a rather wide opening. Again, it may be asked why the opening in the north porch does not lie close to the wall; but it is to be noted that the inner edge of the opening is flush with the *enthynteria*, and if an altar was placed there, as has been supposed, it was convenient that it should stand free. Besides, it is even possible that the passage served as a channel to lead off the overflow of water from the θάλασσα, although all traces of an artificial channel have disappeared in the course of the vicissitudes which the structure has undergone. I have already pointed out that the rock foundation slopes towards the outside.

Since the solid rock, with which the sacred monuments were incorporated, lay at some depth under the floor of the West Cella (the trident mark is 1m. 9 below), a kind of crypt or natural lower story was thus formed, and openings must have been made in the cella floor through which the trident mark and the water could be seen. What Pausanias says about the διπλοῦν οἶκημα always used to be referred to this crypt.² But as this interpretation has been again attacked in quite recent times, I am reluctantly

¹ *Papers of the Amer. School at Athens*, I. p. 228.

² *Eu.* Boetticher, *Untersuch.*, p. 193.

Dorpfeld, *Athen Mitth.* XII. p. 58. Miss Harrison, *Myth. and Mon. of Athens*, p. 493.

and others.

obliged to attempt one more explanation of the passage in Pausanias which has excited so much controversy.¹

Paus. I, 26, 6. "Ἔστι δὲ καὶ οἶκημα Ἐρέχθειον καλούμενον.² This sentence is ambiguous; the word Ἐρέχθειον could be applied to the Erechtheus-cella just as well as to the whole temple, and the word οἶκημα to a separate chamber just as well as to the whole building. πρὸ δὲ τῆς ἐσόδου Διὸς ἐστι βωμός Ὑπιάτου, κ. τ. λ. Which entrance is this of the three? Unfortunately the altar of Zeus Hypatos cannot be located, for there is no evidence to warrant our identifying it with the βωμός τοῦ θυηχοῦ.³ Each of the three doors has been suggested. The door of the caryatid porch is the most unlikely, and the arguments of Michaëlis⁴ in its favour have been refuted by Petersen.⁵

The most usual theory is that the entrance referred to by Pausanias is the richly decorated north door. Lately, however, Cooley, corroborated by Dorpfeld, has tried to prove that the entrance called simply ἡ ἐσόδος must be the east entrance.⁶ If we accept this interpretation, οἶκημα must refer to the whole temple, while on the other hand if οἶκημα refers to the western half (that of Erechtheus) only, then the ἐσόδος mentioned by Pausanias must be the north door of this half.

Ἐσελθοῦσι δὲ εἰσι βωμοί, Ποσειδῶνος, ἐφ' οὗ καὶ Ἐρεχθεὶ θύουσιν ἐκ τοῦ μαντεύματος, καὶ ἥρωος Βούτου, τρίτος δὲ Ἡφαίστου. γραφαὶ δὲ ἐπὶ τῶν τοίχων τοῦ γένους εἰσὶ τοῦ Βουταδῶν. One consequence of Cooley's hypothesis, also supported by Dorpfeld's authority, is that the three altars must have stood in the East Cella,⁷ that is to say, the cultus of Poseidon-Erechtheus, and the rest was carried on in the East Cella, and the West Cella was empty, the θάλασσα Ἐρεχθίς, it is true, being in the crypt. It is supposed that the project for transferring the ancient Athena-image from the 'old' temple to the East Cella of the Erechtheion had been abandoned for some reason or other, and that the ξόανον remained in the 'old' temple which Pausanias begins to describe at the words *ἱερὰ μὲν τῆς Ἀθηνᾶς, κ. τ. λ.* (§ 7)⁸

For reasons connected with the cultus, the whole theory seems to me untenable.

¹ In my opinion it is not necessary to assume *a priori* that Pausanias is describing the shortest available circuit. It is possible that here and there he may have retraced his steps or planned the description from another point of view.

² On the whole question compare the important paper of Fritzwangler *Sitzungsber. d. Ak. d. Wiss. zu München*, phil.-hist. Cl. 1898, i. pp. 319 ff.

³ Petersen, *Ath. Mitth.* x. p. 8.

⁴ *Ibid.* ii. p. 19.

⁵ *Ath. Mitth.* x. p. 7.

⁶ *Amer. Journ. of Archaeology* iii. p. 390 ff.

Dorpfeld's corroboration, *ibid.* p. 393, 1.

⁷ Rangabe (*Ath. Mitth.* vii. p. 332 ff.), and Fergusson (*loc. cit.*) localised the altars in the East Cella. Fergusson assigned the East Cella to Erechtheus and the West Cella to Athena. This theory is on grounds of cultus inconceivable, and indeed has never found favour.

⁸ The theory that the ξόανον was not removed has already been developed by Dorpfeld (*Ath. Mitth.* xxii. p. 171 f.), with a view to shewing that Strabo's words (ix. p. 396) *ὁ τε ἀρχαῖος νεὸς τῆς Πολιάδος, ἐν ᾧ ὁ ἔσβεστος λύχνος* ought to be applied to the "old" temple

First: It is sufficiently clear from the context—Ποσειδῶνος (βαμὸς), ἐφ' οὗ καὶ Ἐρεχθεὶ θύουσιν ἔκ του μαντεύματος—that the principal altar was the altar of Poseidon-Erechtheus, or, to express the relation more accurately, that Poseidon is here identical with Erechtheus.¹ Further, the priesthood of Poseidon-Erechtheus kept their ancestral pictures and the altar of their ancestor in the same chamber. It seems therefore self-evident that these objects were in the same chamber as the Poseidon monuments. We may suppose, if we choose, that other subsidiary cultus objects were kept in the west hall, contiguous to the West Cella.

Second: It is clear from the familiar inscription, *C.I.A.* i. 322—τοῦ νεοῦ τοῦ ἐμ πόλει, ἐν ᾧ τὸ ἀρχαῖον ἄγαλμα—that not only was the cultus of Poseidon-Erechtheus to find its home in the building, but also the cultus of Athena; and as a matter of course Athena was to be worshipped in the East Cella. The first part of this project was actually carried out, i.e. the cultus of Poseidon-Erechtheus was provided for. Now surely, if there was a distinct intention to proceed with the installation of the Athena-cultus, the Erechtheus worship would be established in the cella built specially for it, thus leaving the Athena-cella free. If the ξόανον was for some reason left behind in the 'old' temple it does not affect this part of the question, that is to say if either cella was left empty, it must have been the *East* Cella.

It seems, however, impossible on other grounds that either cella should have been left empty.

The documentary evidence for the common worship of Athena and Poseidon-Erechtheus is too familiar to need repetition. Is it conceivable that the Eteobutadae, hereditary custodians of the allied cultus, should have performed the worship of one divinity in the new building and left the other behind in the 'old' temple, especially as the transference of the old image was resolved on when the Erechtheion was built, the conservative faction in religion being, as Furtwängler has suggested,² most likely responsible for its erection?

The ancient ξόανον was not a mere curiosity, so that its desertion could be intelligible. It was a real cultus-image in the proper sense of the word, and it and no other could have been the object of the ritual in the Plynteria and Kallynteria.³

It may be asserted that the Erechtheion was built on the site of an older temple devoted exclusively to the worship of Poseidon-Erechtheus. But the goddess and the hero shared a temple in Homeric times (B 546 f., where μιν means Erechtheus).⁴ And there is later evidence for the same community

¹ For the evidence v. Topffer, *Attische Genealogie*, p. 116, 1, and others.

² *Meisterwerke*, p. 192 ff. (*Masterpieces*, p. 132).

³ The passages on the Plynteria confirm Miss Harrison's suggestion that the old ξόανον

was a seated image (*Myth. and Mon.* p. 495). For Xenophon (*Hellen.* i. 4, 12) and others call it ἕδος. Suidas s.v. οἱ νομοφύλακες τίνες; uses the word ξόανον in referring to the same ritual.

⁴ E. Rohde, *Psyche*, i. p. 135. 2 f.

of worship, *e.g.* Herodes Attiens' inscription from the Via Appia,¹ which, though expressed in Homeric forms, reflects contemporary conditions. The *οἰκουρὸς ὄφης* is sacred to Athena, it has been reasonably suggested that worshippers saw in the snake a continual re-incarnation of the earth-born Erechtheus.² Petersen very justly argues that as the snake belonged to the goddess, its abode was probably in the goddess's temple.³ Another important testimony to the worship of Athena in the Erechtheion is given by Herodotus (VIII, 41). The *priestess* brought the *ἐπιμήνια* to the snake.⁴ This priestess can only have been the priestess who belonged to the race of the Eteobutadae, and served Athena in the same temple. It is evident from the gloss of Hesychius *s.v.* *οἰκουρὸν ὄφιν* that the Polias dwelt in the Erechtheion, as Eustathius, p. 1423. 7 f., has rightly interpreted the passage. So too the sacred olive-tree, created by Athena, stood in the Erechtheion. (Hdt. VIII, 55).

To return to Pausanias. He enters by the north door and sees in the western half the three altars and the pictures of the Butadae. He then goes on with his description, using the words to explain which I have had to enter on this enquiry. *καὶ (διπλοὺν γάρ ἐστι τὸ οἶκημα) καὶ ὕδωρ ἐστὶν ἔνδον θαλάσσιον ἐν φρέατι, (τοῦτο μὲν θαῦμα οὐ μέγα, κ.τ.λ.) καὶ τριαίνης ἐστὶν ἐν τῇ πέτρᾳ σχῆμα. ταῦτα δὲ λέγεται Ποσειδῶνι μαρτύρια ἐς τὴν ἀμφισβήτησιν τῆς χώρας φανῆναι.*

The word *διπλοὺν* has been thought to refer to a horizontal or to a vertical division. (It can have both significations; for the latter compare Lysias I, 9.) Furtwangler explained it by assuming a lengthwise division of the West Cella,⁵ but Dörpfeld pronounces this explanation to be inconsistent with the actual remains,⁶ and agrees with Cooley in identifying the East Cella and West Cella with the two parts of the *διπλοὺν οἶκημα*. Now, I have tried to show that in the whole of § 6, Pausanias is describing only the West Cella, and if this is so we must reject the hypothesis of Cooley and Dörpfeld and return to the old theory, according to which the *οἶκημα*, *i.e.* the part of the temple belonging to Erechtheus, was *double* in the sense that it had a crypt, and that this crypt contained the "Sea" of Erechtheus and the representation of Poseidon's trident.

In speaking of the West Cella as 'double,' we naturally do not mean that there were actually two complete stories. Michaelis supposed that there were,⁷ but his opinion was refuted by Borrmann.⁸ Nor is the passage

¹ Kuhn, *Epigr. gr.* 1016, line 89 f.

καὶ γὰρ Ἀθηναίῃ (ποτ') Ἐριχθόσιον βασιλῆα
νηῶϊ ἐγκατέθηκε συνέστιον ἔμμεναι ἱρῶν

Erechtheus is here confused with Erichthonios as frequently (*e.g.* Apollod. iii, 14). Still more explicitly speaks Plutarch (*Quaest. conv.* ix, 6).

² Rohde, *Psyche*², p. 135 f. Furtwangler, *Meisterwerke*, p. 199. *Masterpieces*, p. 136. Dörpfeld, *Alt. G. anal.* p. 115, 2.

³ *Alt. Mitth.* xii p. 63.

⁴ As to the interpretation of Herodotus' account of the temple on the Acropolis, it is to be noted that the snake lives in the Erechtheion; in the same passage the expression *ἐν τῷ ἱερῷ*, which occurs also elsewhere, is employed.

⁵ *Meisterwerke*, p. 191 (*Masterpieces*, p. 136).

⁶ *Alt. Mitth.* xxii, p. 161.

⁷ *Ibid.* ii, p. 29 ff.

⁸ *Ibid.* vi p. 381 ff.

Paus. III, 15. 8 to be taken as evidence against a crypt. The 'double building' consists of the West Cella, above, and below the cellar-like chamber, roofed by the floor of the cella and containing the divine mementos whose existence had fixed its position.¹

MARTIN P. NILSSON.

Athens.

¹ For the succeeding part of the periegesis it follows that Pausanias (in 26, 7 and 27, 1) is describing the East Cella of the Erechtheion to which the ξόανον was transferred, whether he reached it by way of the open air, or through the interior of the two temples. The proof of this is that in 27, 2 he comes to the sacred olive-tree. For, as Herodotus (viii. 55) states, the olive-tree stood in the Erechtheion, where the θάλασσα was, or more correctly, as it

must have been in the open air (Bormann, *Ath. Mitt.* vi. 374 f.) belonged to the sanctuary of Erechtheus. That Pausanias should refer to the olive-tree immediately after describing the building of which the Erechtheion was a part is more natural and fitting than that he should first describe the Erechtheion, afterwards insert an account of the "old" temple, and finally return to the olive-tree which belonged to the Erechtheion.

ARCHAEOLOGY IN GREECE, 1900-1901.

THERE is so much to record from Greece proper and the islands, that it will be necessary to omit Asia Minor from the scope of the present article. It has been a year of surprises, from the episode of the sponge-diver knocking at the door of the Minister of Education to report a shipload of statues lying under the sea, to the rediscovery of Aphaea, the unknown goddess who emerged the other day from the pages of Pausanias and Antoninus Liberalis to receive the honours due to her in the famous temple on Aegina.

In describing the results of excavations it is convenient to begin as I did last year with the prehistoric period and with Crete, where a number of workers, two Italians, two Americans, seven Englishmen, have been exploring early sites. The French School has not excavated there this year, but has organized a geographical expedition under the leadership of M. Ardaillon which is to make a much-needed survey of the island.

I am indebted to Mr. Arthur J. Evans for the following summary of his latest discoveries :—

“The renewed exploration of the prehistoric Palace at Knossos has produced results not inferior in interest to those of last year. I was fortunate in securing the continued services of Mr. Duncan Mackenzie as my assistant in directing the works, and of Mr. D. T. Fyfe for the execution of the architectural plans and drawings. The building itself turns out to be considerably more extensive than could be foreseen from the parts of the ground plan already brought to light. The Western Court has apparently an almost indefinite extension. Ten more magazines, some of them full of the huge store-jars, were opened, in addition to the eight explored last year, and the outer wall beyond these was traced to its north-west angle. To the north, the small portico discovered last year was found to communicate with a distinct quarter of the building containing a large bath with a descending flight of steps and a parapet with column bases. The northern entrance way also proved to be much deeper, and to have a further extension than had at first been supposed.

“What had been described in the provisional report of my last year's excavations as the ‘Eastern Paved Area,’ is now seen to be in reality a great Central Court. East of this a whole extensive quarter of the Palace is now revealing itself, and it even appears that the principal State Chambers were on this side. Towards the north-east were smaller magazines fitted with stores of vases of various forms. In other chambers were presses for wine or oil. In one room a sculptor had evidently been at work at the moment of the destruction of the building, and a beautifully carved stone

amphora of finished execution stood beside another just roughed out. Near this was another chamber, which, from the arrangement of the stone benches within it, had the appearance of a school or class room. About the centre of this eastern quarter of the Palace the walls were found suddenly to descend to a much greater depth, and here was made the great architectural discovery of the season. Stone stairs began to appear which were followed down a triple flight—the lowest flight beneath the first—to a columnar hall or *megaron*, with walls rising some twenty feet. A side passage leads from this to a second similar hall opening to a kind of forehall with eleven doorways, and this in turn on an outer portico. The staircase leading down to the first mentioned hall is flanked above and below by a breastwork, showing the sockets of the original wooden columns, and with this double tier of colonnades the hall itself (which at this end seems to have been partly hypaethral) must have presented somewhat the appearance of the court of an Italian Renaissance Palace. There are traces of the beginning of a fourth flight of stairs, and the unique character of these remains can be appreciated when it is remembered that even at Pompeii staircases one over the other have not been brought to light. The connexion of these princely halls with the part of the building immediately to the south can only be made out by a fresh campaign of excavation.

“It is impossible to make more than the most summary mention of the numerous individual finds of interest made in the course of this season’s work. The early connexion between Crete and Egypt has received a striking illustration from the discovery of a lid of an alabastron finely engraved with the name and divine titles of Khyan the Hyksos king, whose monuments are rare in Egypt itself. A magnificent ‘draught-board’ of ivory, partly plated with gold, and of crystal plaques backed by silver and blue enamel, or *kyrnos*, seems to be based on the Egyptian form of the game. What appears to be another game is provided with bone fishes engraved with various scores and a series of characters many of them identical with those of the later Greek alphabet. This is in fact a third Knossian ‘signary.’ A fresco fragment representing a hand holding a gold necklace with pendants in the shape of negroes’ heads, takes us as far afield as Nubia or the Libyan Oases. A very beautiful Babylonian relic was also found in the shape of a gold-mounted cylinder of lapis lazuli, engraved with mythological subjects.

“Of the inscribed tablets exhibiting the prehistoric linear script of the Mycenaeans, several important deposits were found, including one tablet larger than any yet discovered, with twenty-four lines of inscription containing lists of persons under various headings. Many clay seals of great interest were also found with them. Some of these present cult-scenes. In one case a Goddess is seen on her sacred pyramidal rock between lion supporters while a votary appears in front and a shrine with consecrated columns behind. In another case a female votary bears a cup to a seated Goddess beneath the Solar orb. Another seal shows a kind of Minotaur seated on a throne and others Mycenaean ‘daemons.’ Parts of fresh wall-

paintings were also found, some of them giving entirely new versions of Mycenaean costume—such as a lady with a high looped dress, and male figures, perhaps priests, in banded stoles. Some very remarkable fragments of bull-hunting scenes show girls taking part in the dangerous sport, dressed like the male *toreadors* of the period. But of still higher interest in their bearing on the history of ancient art are the parts of human figures in painted stucco relief now for the first time brought to light. The modelling of the limbs and muscles shows a power and naturalism descending to the most minute details, such as the delineation of the veins, which seems more in keeping with the spirit of the Italian Renaissance than with classical antiquity. No face has yet been found, but the back of a male head claims a quite exceptional interest. It is surmounted by a crown, in the same stucco relief, representing a succession of slanting *fleurs de lis* with an upright one in the centre,—copies from an original in inlaid metal-work. A part of the body, though possibly not of the same figure, has also been preserved with a kind of chain of honour of the same lily pattern round the neck. We seem to have here parts of the actual effigies of Mycenaean kings and princes. Some fine specimens of the ‘Palace Style’ of Mycenaean painted ware were also found, and others with naturalistic designs of plants and grasses, worthy of Japanese art.

“The exploration of the extensive Neolithic settlement that underlies the Palace also produced interesting results. Numerous so-called ‘idols’ of clay and stone were discovered of types antecedent to those hitherto known from the islands and mainland of Greece. These and the stone-maces seem to point to very early Anatolian influences. The lowest limits of this settlement—the first of pure Neolithic Age explored in Greece,—hardly come down later than 3000 B.C.”

From Knossos to Phaestos, the second great palace, is a long day’s ride to the south past the lower spurs of Ida. Or a tour of a week, combining fine scenery with notable sites, may be made by way of Psychro, Goulas, Gournia, Hierapetra, Viano, and Gortyna. The traveller coming this way will realise the extent and natural fertility of the domain from which the lords of Phaestos drew their wealth, as he descends upon it from the east and rides the full length of the Messara, the only plain in Crete worth the name. It is twenty monotonous miles of deep cornland, in great part lying fallow since the Moslem exodus. A fence of low hills shuts off all seaward view. At last the bay of Matala lifts into sight, due west, with the Letoan islets on its horizon, and beyond the olive-groves which now fill the foreground a steep yellow cone rises and cuts the sea-line in two. That is the acropolis of Phaestos. It is girdled by the river Electra, whose lingering waters account alike for the sudden luxuriance of the western Messara, and for the malaria that is its scourge. The acropolis descends in three great steps from west to east. Evidently the builders were not burdened by any consideration of defence, for they set their palace on the lowest of these contiguous heights.

Professor Halbherr and Mr. Pernier, of the Italian Archaeological Mission, excavated here from June to October of 1900, and again from March to June of the present year. They found the palace choked and subdivided by the remains of a squalid Hellenic village. Bit by bit as these were demolished the bold and stately lines of the original plan began to appear, but the full appreciation of its extent and grandeur only became possible in the present summer.

The area under excavation is bounded to the north and east by precipices, to the south by a gentler slope carrying the road of approach. To the west the palace proper ended in a railed outer terrace; beyond was a sunken court, shown by the tiers of stone seats built up against its northern retaining-wall to have been a place of assembly, perhaps of public sacrifice if a puzzling structure at one side of it is rightly interpreted as an altar. In this direction there is room for further developments; the high ground to north and east may conceal important buildings. Within these limits lies the palace, a compact rectangle over a hundred yards square. The main entrance is from the south into a colonaded court enclosing approximately the south-eastern quarter of the whole area. To the left as you enter is the square south-western block, filling another quarter, a complicated mass of basement-chambers including a small tank and a room with stone benches. Opposite, across the court, is the entrance to the north-eastern block, as yet only partly excavated; here is what may be a dormitory and a stair descending to a small *megaron* on a lower terrace. But the real centre of interest is the north-west quarter, built on two higher terraces, and containing the State Apartments. To reach them by their principal entrance we leave the main court by a corridor twenty feet wide and a hundred feet long, and gain the west terrace. Turning to the right we ascend an imposing flight of twelve steps, forty-five feet wide, and pass through a vestibule into a fine hall divided into aisles by a row of three columns. Although the way to its main entrance is somewhat circuitous, this central *megaron* is in easy communication with every part of the palace. A side-staircase descends to a large anteroom opening directly from the main court, another to the more private rooms in the north-east quarter, which were perhaps allotted to the women, and another ascends to chambers on a higher terrace to the north. From the west terrace a magnificent flight of twenty-nine steps, placed at right angles to the entrance-steps of the *megaron*, mounts to the same higher level.

The closest parallel to Knossos is furnished by a corridor opening out of the anteroom just mentioned, and giving access to a double row of store-rooms with massive jambs; in the centre is a square pillar, like the famous pillars inscribed with double axes at Knossos. The bulk of the masonry is limestone, but here too we find wall-linings of gypsum, combined in one case with a triglyph-like arrangement of three wooden pilasters divided by strips of plaster. The triglyph recurs on the pilasters of a stone bench here as well as on a fresco from Knossos. Numerous characters, especially the double axe, the star, and the trident, appear on the limestone blocks, but two clay tablets and a group of signs scratched on a jar are the only writings that have been recovered.

There are few traces of wall-painting or other decoration, although the numerous fragments of presumably local 'Kamárais' ware vie with those from any other site in the delicacy and intricacy of their painted designs. The local 'Mycenean' pottery, on which a bright red glaze predominates, is of poorer quality. Among the latest finds is an oblong piece of shell engraved with a procession of four figures, draped to the feet and apparently female, with human bodies and the heads of animals and birds. They carry long staves. Besides the Tiryns fresco one may compare some recently found seal-impressions, one from Knossos which shows a zoocephalous personage seated on a throne, and others from the Zakro hoard with figures of bull-headed demons. We may look for a full discussion of the whole subject in M. Perdrizet's publication of the zoocephalous terra-cottas from Lycosura.

Professor Halbherr also excavated in the precinct of Asclepios at Lebena last year, and obtained a long inscription recounting cures. As regards the Gortyna Code inscription, matters are at a standstill. It is very desirable that the permanent preservation of this unique national monument should be secured, and that the Roman theatre and the adjoining buildings should be thoroughly searched for other fragments of the Laws. But nothing can be done without building a new canal and diverting the mill stream, a costly undertaking which affects many private interests, and can hardly be initiated except by the Cretan Government.

During May and June two other excavations were carried out under the auspices of the Cretan Fund, at Kato-Zakro by Mr. Hogarth, and at Praesos by the British School of Athens. Both sites are in the modern eparchy of Sitia, at the east end of the island, the region where ancient authorities place the aboriginal tribe of Eteocretes. Praesos, the Eteocretan capital, lies high on the central plateau, Zakro on the sea-shore half way up the east coast. The lesson of the excavations, confirmed by exploring journeys which covered the whole surrounding district, is that Mycenean settlements were established comparatively early along the coast wherever a sheltered bay or a fertile plain invited the foreign trader to establish his factories, but neither advanced into nor greatly influenced the highlands occupied by the Eteocretan stock.

The beach of Lower Zakro was an ideal spot for such a trading post. Its sheltered bay is frequented by caiques from the east bound for African or southern Cretan ports, especially by the sponge-boats which sail every year from Syue and Calymnos to the Cyrenaica; and behind the bare limestone hills which hem in the little plain there is a fertile hinterland, the produce of which is shipped from warehouses on the beach. Here accordingly Mr. Hogarth found abundant remains of a Mycenean colony. His first task was to excavate the *λάκκος*, a bottle-shaped cavern full of early pottery, which Mr. Halbherr found the natives excavating when he visited the site in 1892. The spoilers soon desisted, having no market for their finds, and left a vast amount for Mr. Hogarth to dig out, chiefly 'Kamárais' cups and lamps, including some new local varieties. The proportion of whole vases is so large that one is tempted to regard them as the accumulated offerings of

generations of pious mariners, originally deposited perhaps in a shrine elsewhere. The conspicuous Cyclopean walls which break the surface of a low hillock near the sea proved to be the basements of a number of detached houses, some of considerable size. In some cases what remains is little more than the cellarage, subdivided by partition walls of large flat bricks, and well stocked with earthen jars for the storage of wine and oil. The finer kinds of Mycenaean pottery were in common use, and there were traces of fresco-painting. Evidently the well-to-do owners of these houses were traders rather than farmers or fishermen. A remarkable discovery made in one of the larger houses may be held to imply extended commercial relations; this was a heap of several hundreds of clay seal impressions, many of them three-sided, and therefore corresponding to a well-known form of Cretan seal-stone. There are more than a hundred and fifty different types, besides many duplicates. We cannot determine the purpose for which they were stored, whether they had been attached to bales of goods, and were preserved as a rough and ready way of keeping account, or to documents written on some such perishable material as the palm-leaves which according to Cretan tradition furnished the earliest writing-paper. At any rate the owner of the collection was familiar with writing, for two inscribed clay tablets occurred close by. The same house yielded a vase of new and graceful form—the nearest parallel is one of the ‘Keftiu’ shapes—with a decoration of stars and murex-shells, a fine if late example of that fascinating school of marine design which appears in equal vigour at Vaphio, at Phylakopi, and in Egypt, but is unaccountably rare in Central Crete. Some megalithic buildings in the valley of Upper Zakro proved to be post-Mycenaean farm-houses. Geometric tombs were found in the same neighbourhood, and some much earlier, almost neolithic, interments in caves along the gorge through which the river of Upper Zakro descends to the sea.

The excavations at Praesos, conducted by myself as Director of the British School at Athens, with the aid of Mr. J. H. Marshall and Mr. R. D. Wells, architect, did not bear out our expectation that the Eteocretan capital would prove to have been an important centre of Mycenaean culture. It is true that the Acropolis yielded a product of pure Mycenaean art, under singular circumstances. A large lentoid gem, with a representation of a hunter and a bull, was found embedded in the mud-mortar of a late Greek house, having evidently been plastered in unseen along with the earth from an adjacent rock-cut tomb which had been emptied by the Hellenistic builders. But no other vestige of Mycenaean occupation was found upon the site of the later City. The waterless ridge, encircled by deep ravines, offered nothing to primitive settlers. The earliest remains lie a mile away in a lateral valley near a spring, where one of several groups of megalithic walls was shown by excavation to be a sub-Mycenaean homestead. Its strictly rectangular plan, its massive thresholds, the spiral ornamentation of large jars in its cellars, show that, whatever fate had overtaken the cities on the coast, a certain standard of good workmanship had been their legacy to the people of the hills. Nearer the city two tombs of the

same period were discovered. the one, a square chamber with a passage, yielded parts of two painted *larnakes*, thoroughly Mycenaean in design, a gold ring, a crystal sphere, parts of a silver vase and a quantity of iron swords. The other was a well-built bee-hive tomb, differing from the usual type in being entered through a vestibule; it contained an enormous mass of geometric pottery, an openwork gold ring, a bronze fibula and other objects in gold, ivory and Egyptian porcelain. In the same neighbourhood a number of later tombs were opened, ranging from the geometric period to the fourth century. Among the numerous geometric vases there are several new types, in particular a vessel in the form of a bird and a slender jug painted with delicate white patterns on a black ground. The later graves yielded jewellery in gold, silver and crystal.

Prominent among the considerations which caused Praesos to be put upon the programme of the Cretan Fund was the fact that an inscription in an unknown tongue, presumably the Eteocretan, had come to light there, and the hope that others might be found. It was dug up at the foot of the Altar Hill, a limestone crag precipitous on three sides which dominates the south end of the site, and had probably fallen from the level summit, long known to the peasants as a hunting-ground for 'antikas.' More fortunate than Professor Halbherr, who made a small excavation here with the same object before the Revolution, we obtained a second and longer inscription of seventeen lines and apparently in the same non-Hellenic language, close to the entrance steps of a *temenos* on the hill top. It must have been a frequented place of sacrifice, for the rock was covered several feet deep with a deposit of ashes, burnt bones, and votive offerings of bronze and terra-cotta. The terra-cottas, ranging from the sixth to the fourth century, are important as giving a glimpse of a local school of artists working in clay (for Crete has no marble of her own and Praesos at any rate imported none), and possessed of an independent and vigorous style. The great prize is the upper part of an archaic statue of a young god, half the size of life; the head and shoulders are intact, the remainder has disappeared. An equally well-preserved head, with fragmentary body, of a couchant lion is a further revelation of early Cretan sculpture. The bulky fragments of another lion, life-sized, later and feebler in style, prove the persistence of the local method. Among the bronzes there is a noteworthy series of votive models of armour, helmets, cuirasses and shields. The pottery shows that the Altar-hill was frequented from the eighth century onwards. By this time Praesos had probably become the religious and political centre of the district, a primacy for which it is admirably fitted by its position at a meeting-place of valleys mid-way between the two seas. The Acropolis was fortified, the water of the distant spring brought to its foot in earthenware pipes, and a small temple built on its summit. The upper slopes of the Acropolis, though much denuded, yielded two archaic bronzes. Trial-pits in the deeper terraces below revealed only Hellenic things, plainly built houses of limestone, roadways and cisterns, and a rubbish-pit full of terra-cottas. A building larger and more massive than the rest was completely excavated; it contains 8 rooms and has a front 75 feet long. Outside the town two minor

sanctuaries were investigated; one adjoining the spring already mentioned contained large terra-cotta figures of a goddess of quite new type. A survey of the whole site was made by Mr. Wells, and a systematic exploration of the surrounding country by Mr. Marshall.

Although Praesos was barren of Mycenaean remains they are evident enough at Petras on the modern harbour of Sitia seven miles to the north. I made some trials here in June. Nine-tenths of the site has been ruthlessly terraced by its Moslem owner and would not repay a large excavation. The remaining tenth is occupied by cottages, and here under the roadway it was possible to uncover one side of a large building containing pithoi and "Kamárais" vases. On the hill-top there remain a few foundations of a large mansion, and outside the walls—for Petras is unique among early Cretan sites in possessing remains of fortifications—was found a rubbish-heap of the now familiar type, yielding whole cups and lamps and sherds of earthenware and steatite. Ten miles east of Petras, across the Itanos peninsula, is another early site, Palaiokastros, which has been sadly mauled of late years by clandestine excavation. In the course of one of his exploring journeys Mr. Marshall made a remarkable discovery here. Heavy rains—the same that flooded Mr. Hogarth out of his quarters on the beach at Zakro—had exposed the corner of a very fine larnax; the native diggers had not noticed it, and he lost no time in securing it and some vases for the Candia Museum. One of its four picture-panels represents a double axe planted upright upon a column, an important illustration of the axe and pillar cults discussed by Mr. Evans in these pages.

A link between these coast-settlements in the Eteocretan country and the great cities of Central Crete is furnished by a previously unknown Mycenaean town, which Miss Boyd and Miss Wheeler, working in the name of the American School at Athens, discovered and partly excavated in May and June. The site is called Gournià, and lies on undulating ground near the sea, a little to the west of the broad strath which here crosses the island at its narrowest part, from Hierapetra on the south to the smooth beach of Παχία Άμμος on the north, a distance of less than ten miles. Three years ago, when troops were stationed at Hierapetra, the French authorities found it convenient to land all their supplies on the north coast, and cart them across the isthmus. This easy portage must have been largely used in ancient times, and no doubt contributed to the prosperity of the little town which commanded its northern outlet. The buildings already excavated are for the most part small houses, grouped along two well-paved streets. The internal walls are of brick, as in some of the Zakro houses. Both streets lead to a large mansion of regular ashlar masonry, which occupies the highest part of the site. Built of massive blocks of limestone, some of them over six feet long, it reproduces in miniature the characteristic architecture of the palaces of Knossos and Phaestos, and was evidently the residence of the chief man of the place. A lateral passage leads from the main street to a small square building, which seems to have been a sanctuary. It contained a number of

vases and some singular terra-cotta figures resembling those from Prinia in the Candia Museum. This shrine, like the rest of the town, seemed to have been abandoned suddenly, and never very thoroughly plundered. Thus it happened that besides an unusual number of complete vases in clay and stone Miss Boyd obtained an extraordinary collection of bronze implements, ranging from axes and saws to bodkins and needles. No Kamárais pottery was found, and it is evident that the remains are those of an industrial community which flourished towards the end of the Mycenaean period. Among many interesting objects the most remarkable are a bronze statuette in excellent condition, representing a male deity with long snake-like tresses—or possibly, as Miss Boyd suggests, actually crowned with snakes, a series of clay seal-impressions, and an amphora decorated with double axes. The excavation is still in its early stages, and will be continued next year. Before discovering the Gournià site Miss Boyd had opened some geometric tombs near her former field of work at Cavusi, and had explored a late Mycenaean house with remains of brickwork at Argo, a hamlet in the mountains to the south-east.

Professor Dörpfeld's excavations in Leukas have neither proved nor disproved his theory that it was the Homeric Ithaca. He still hopes to find the early capital somewhere near the great harbour of Vlichos on the east coast. Trial-pits in the plain at the south end of the bay showed successive *strata* (1) Greek pottery, (2) gravel without traces of human occupation, (3) *humus* containing prehistoric pottery. On the north-west of the bay there is a still larger plain with a magnificent water-supply on the high ground above it. Here the trial-pits showed the ruins of a small Hellenic city and prehistoric pottery below. A Mycenaean idol has been found. The area to be examined is of course very large. The exploration has extended to neighbouring sites. Dr. Dörpfeld has fixed the site of the Homeric Nerikos, ἀκτὴ ἡπειροιο, known in historic times to Thucydides and Strabo, at Hagios Georgios, a promontory opposite to, and somewhat south of, the Hellenic city of Leukas. The remains have been much destroyed by the construction of a mediaeval fortress, but a certain amount of polygonal walling and ten towers still survive. Further inland a small temple with Greek terra-cottas was discovered. On the island of Leukas a small shrine of Athene has been explored, overlooking the plain which runs down to the bay of Vasiliki on the south-west coast. It yielded an early dedicatory inscription in the Corinthian alphabet, inscribed on the bronze crest of a votive helmet.

I have already referred to the discovery of an important prehistoric settlement near the previously known beehive-tomb of Dimini, an hour's walk from Volo. A second beehive tomb, very similar in form and structure, has now been excavated by Dr. Staes, and although plundered in antiquity it contained a few leavings, trinkets of gold and glass paste, of characteristic Mycenaean types. As at Thorikos, there was a built tomb at one side of the principal chamber. But the walled settlement on the adjoining hill seems to

have possessed a distinct culture, pre-Mycenean in character and probably in date. Only two or three bits of Mycenean pottery were found and they were near the surface; the bulk of the sherds, which are very numerous, belong to a curious local fabric of yellowish clay with a highly-polished, creamy surface, painted inside and out with bold geometric patterns in dull, or only slightly lustrous black paint. The designs are irregular key-patterns, varied by stripes and chequers and frequently interrupted by a single spiral coil, the handles mere protuberances pierced by a string-hole. Hand-polish and suspension-handles are so characteristic of neolithic pottery that it is not altogether surprising to learn that this ware was found in association with stone axes and primitive marble idols, an important fact attested both by Dr. Staes and by Dr. Wide who was present during part of the excavation. The idols differ from those of the Cyclades, and both they and the stone axes may be later than would at first sight appear. It is conceivable that neolithic traditions lingered on in Thessaly after Mycenean culture had won a footing further south. But the painted pottery, which is quite unlike anything yet seen in the Aegean, may equally well be proof of early independent progress on the part of the Thessalians.¹ Mythologists know of a precocious and adventurous race settled on these shores and launching out into the unknown in the age before the Trojan war; it remains for archaeologists to identify and explore *εὐκτιμένην Ἰαωλκόν*.

At Athens the last days of the old year were darkened by the untimely death of Dr. Wolfgang Reichel, the second secretary of the Austrian Institute, one of the most brilliant of the young archaeologists trained in Dr. Benndorf's seminar at Vienna. His books, *Homerische Waffen* and *Vorhellenische Götterkulte*, are lasting memorials of his originality and power. Another gap in the little circle of foreign scholars working or teaching in Athens has been caused by the appointment of Dr. Paul Wolters, long second secretary of the German Institute, to the chair of archaeology at Würzburg. His wide, minute and accurate knowledge was always at the service of students of all nationalities, and his departure is deeply regretted. He is to be succeeded this autumn by Dr. Hans Schrader, who worked with Dr. Wiegand at Priene, and has since been engaged in the arrangement of the new Pergamon Museum at Berlin. As a result of M. Homolle's untiring energy, the annexe for foreign students attached to the French School will soon be completed. Three Belgian members are in residence and have taken an active part in the excavations at Delphi. To one of them, M. de Mot, I am indebted for detailed notes on the work accomplished there and at Tegea. The School has been strengthened by the return of M. Perdrizet and by the presence in Athens for some months during the spring, of M.

¹ Dr. Staes tells me that the only bronze hitherto found in the excavations was in the form of ornaments, as if the metal were rare.

A prehistoric tomb opened by Dr. Tsountas in the same neighbourhood contained a pair of bracelets of bronze overlaid with gold.

Pottier, who delivered a course of exceptionally inspiring lectures in the museums. The government has given a site on the south of the Kephisia Road, a little beyond the British and American Schools, to the Russian Archaeological Institute, which will now have a local habitation at Athens as well as at Constantinople.

Progress is being made with the 'conservation' of the Parthenon, but two years must elapse before it is freed from scaffolding. The work of replacing damaged architraves and cementing minor cracks is finished so far as the western peristyle is concerned, and a new scaffold has now been fixed along the west front and north side for the purpose of making good five capitals, the *abaci* of which are so broken as to afford insufficient support to the architraves. In the course of next year the ruined architrave of the west door will be replaced by a sound block, and it will be possible to remove the unsightly brick arch and the medieval door lining, in which, as is well known, some large inscribed slabs are locked up. A curious incident of the repairs has been the recovery of a pot of red paint which a careless workman allowed to be immured behind the pediment some twenty-three centuries ago. Mr. Andrews, of the American School, who in 1896 deciphered the vanished inscription (in honour of Nero) on the east front with the help of the nail-holes by which the bronze letters had been affixed, has spent some weeks this summer in completing his notes with a view to publication. He has also made a study of the traces left on the architraves by the shields, some of them trophies taken from the enemy, others purely ornamental, which were fastened there at different times. He comes to the conclusion that there were four different series.

Visitors to the Acropolis a year or two hence will find the approaches to the Propylaea completely transformed, at the cost of the Archaeological Society, whose income under Mr. Cavvadias' judicious management continues both to increase and to be wisely spent. The accumulated soil of recent centuries has been removed from the Acropolis rock, the carriage road is being cut away, revealing the old Turkish or medieval causeway many feet below, and a more impressive approach is to be constructed. Further north and east a beginning has been made with the drive which is some day to encircle the whole Acropolis. It is to be hoped that trees will be planted to mask some of the unsightly later foundations which have necessarily come into sight, especially those of Beule's Gate; its substructure is a sorry patch-work which it would be only decent to hide.

In the museums the most important step in advance has been the opening of a room in the Vase-department, devoted entirely to the pottery found in the excavations on the Acropolis. In order to do this one of the workrooms has been sacrificed. The exhibiting capacity of the Museum is strained to the utmost, and it is satisfactory to know that the Minister of Education has recognised the necessity of providing additional space. This might most conveniently be done by building two wings from the present front of the Museum down to the Patissia Road.

In Greece proper the great event of the summer has been Professor Furtwängler's re-examination of the temple on Aegina, resulting in the discovery that it was dedicated not to Athena, not to Zeus Panhellenios, but to an almost unknown local goddess, Aphaea. Years ago Cockerell expressed a hope that the Bavarians would do something to clear up the problems connected with his beloved marbles, and a beginning has now been made, thanks to the liberality of the Prince-Regent and the zeal of the present director of the Glyptothek. In the catalogue which he published last year Professor Furtwängler called attention once more to the unsatisfactory character of Thorwaldsen's restorations and of the order and grouping of the figures. It has long been felt not only that revision was necessary, but that it ought to be preceded by a search for fragments that might have been overlooked in the very superficial excavation of 1811. That, as is well known, began as a purely architectural investigation, lightly undertaken by four young travellers who bivouacked in the adjoining cave and employed a few peasants to turn over the stones and others to pipe while they worked. When the first statue came to light they extended the scope of their digging, but the whole venture lasted only sixteen days. One can but wonder at the comparative accuracy of Cockerell's record, remembering that his notes were made in haste and the drawings finished years afterwards in the intervals of professional work. Professor Furtwängler was accompanied by Dr. Herrmann of Dresden, Dr. H. Thiersch, and Mr. Fichter, the two latter having previously worked for the Sieglin expedition at Alexandria.

The interior of the temple has been cleared, revealing a sunk area in the floor for the base of the cultus-image, parts of which, a colossal eye and other fragments of ivory, were found in 1811. Post-holes at the four corners mark the position of the wooden railing mentioned in the temple-inventory. Outside, on the artificial plateau which surrounds the temple, fragments of the pediment sculptures were found in all directions, in particular the missing left hand of Athena and a right hand clutching a stone. Two well-preserved heads, one of a bearded warrior from the east pediment, the other of a young man wearing a Corinthian helmet from the west, were lying with fragments of arms and legs in the Propylaea to the south-east, and no less than five helmeted heads, not necessarily from the pediments, a very archaic female head and that of a girl in the transitional style of about 480 B.C., had found their way into a cistern at the north-east angle of the platform. Many torsoes are still missing, but they must long ago have gone to the lime-kiln.

Of the newly-discovered buildings on or about the temple plateau the Propylaea is the most important. It is not the building at the south-east angle, which Cockerell marked as *Propylon* on his plan, but lies further west, at right angles to the longer axis of the temple. It has two chambers, facing inwards and outwards, and the roof of each is borne by two octagonal columns. Such columns have been found at Troezen and at Megara in the sixth century fountain-house, so we may suspect that they represent a local type, popular about 500 B.C. in the cities round the Saronic Gulf. North of the Propylaea lies the great altar, opposite to the east front of the temple, and

equal to it in width. To the south-east are a number of small chambers, some older than the present temple, which may have served as lodgings for the priests. Other subsidiary buildings, constructed in the same manner and probably at the same time as the temple, lie in the wood five minutes' walk to the west, a reservoir and a well-built house with five rooms, the largest being a dining-hall with a low divan three feet broad running round the walls. The neighbourhood was by no means the desert it now appears; traces of ancient occupation abound in the neighbouring valleys.

The present temple was not the first. Early pottery, fibulae, and 'island-stones' were turned up at different points below the layer of builders' waste left by the construction of the present building. The evidence of the pottery found in this stratum confirms the view to which Professor Furtwängler was led by his study of the sculpture, that the temple was built soon after 490. A careful dissection of the great platform to the east of the temple brought to light one, if not two older altars, various early walls, and the scattered members of a sixth-century Doric temple, many of them exhibiting most delicate chiselling and colouring. Most important of all, the dedication-inscription of the older temple was recovered, cut on a slab of limestone five feet long in fine sixth-century lettering. Expanded it reads

. . εοίτα ἱαρέως ἑόντος τῇ Ἀφαίᾳ ὁ οἶκος
ἐποιήθη, καὶ ὁ βωμὸς καὶ ὁ ἐλέφας ποτεποιήθη,
τὸ τεῖχος περικύκλωται.

The inscription records the building of a temple to Aphaea, the setting up of an altar and an ivory image, and perhaps the enclosure of the *τέμενος*, at some time in the sixth century. Aphaea is not altogether unknown. Pausanias mentions her temple in Aegina, 'on the way to the mountain of Panhellenian Zeus,' and identifies her with the Cretan Britomartis and Dictynna. Antoninus Liberalis recounts the wanderings of the chaste Britomartis, 'who shunned the converse of men and chose ever to remain a maid,' and tells how in Crete Minos loved her, and to escape from him she took refuge on a ship and came to Aegina, and there 'fled into the grove, where her temple now stands, and vanished away,' *ἀφανὴς ἐγένετο*, and was for that reason called Aphaea, and worshipped as a goddess by the people of the island. Pausanias says that Pindar composed an ode about her for the Aeginetans, perhaps, as Furtwängler suggests, on the occasion of the dedication of the new fifth-century temple.

The finding of the Europa-kylix in the temple in 1811 warranted a hope that the site might be rich in fifth-century vases, but this has not proved to be the case. In later classical times the offerings seem to have ceased altogether and the temple to have been deserted. But the lower strata teemed with offerings in bronze and earthenware, figures of animals and birds, scarabs and gems, bronze reliefs, an engraved *tridarna* shell and other imported goods of Phoenician character, and a rich series of geometrie, proto-Corinthian, Corinthian and Naukratite vases. There is even a sprinkling of Mycenaean potsherds, and a series of Mycenaean idols representing a goddess, sometimes

with a child in her arms, which show that Aphaea or her prototype was worshipped on this site in the very dawn of Greek civilisation. Many of them were found near the cave below the temple terrace. One can hardly doubt that this was the earliest sanctuary and the traditional scene of the goddess's vanishing from mortal view, or that the legend which brought her oversea from Crete contained a germ of historic truth. It is interesting to note that at Delphi, another sanctuary with traditions of Cretan influence, Mycenaean pottery was found near the altar, and Mycenaean tombs close by; the digging of foundations for the new Museum has led to fresh discoveries of this kind. Mr. Mendel tells me that a *bügelkanne* occurred among the early, mainly geometric, pottery on the site of the temple at Tegea. On the other hand the earliest objects found in the precinct of Artemis at Lousoi in Arcadia, excavated two years ago by the secretaries of the Austrian Institute and fully described in the new *Jahreshefte*, were bronzes of the same post-Mycenaean character as the earliest finds at Olympia.

At Delphi M. Homolle has just brought to a close the tenth and probably the last season of the excavations by clearing the remains of a group of temples lying outside the sanctuary at a spot known as Marmaria half-way between the 'Logari' and the gymnasium, on the left-hand of the road from Arachova. Here Pausanias saw four temples, of which that nearest to the sanctuary of Apollo was dedicated to Athene Pronoia, and was the scene of the miraculous repulse of the Persians. The excavations have led to the discovery of five buildings placed in a row, on what is not so much a terrace as a shelf cut into the hill-side and protected on the north by a high retaining wall. Approaching from the 'Logari,' one enters the *ῥέμενος* by a gate at its north-east corner, and comes almost at once upon the foundations of a large temple of poros-stone, with six columns on the front, which was already in ruins when Pausanias was here. Its entablature was in terra-cotta, and important remains of it have been found, including an archaic figure of Nike, which must have formed one of the acroteria. The next building has yielded fragments of archaic sculpture in the finest Ionian style. Next comes a little Ionic building, to which may belong some delicate miniature sculptures like those which adorned the base of the temple-statue at Rhamnus. Next, the Tholos, built of Parian marble, and destined, on account of the beauty of its sculptured decoration, to take a prominent place in the history of Greek architecture. Its metopes, of which numerous fragments are preserved, are said to resemble the sculpture of the Mausoleum. Nothing is known as to its use or dedication, but we know that it was famous in antiquity, for a work by Theodoros of Phocaea '*On the Round Building at Delphi*,' is mentioned by Vitruvius in a list of architectural treatises. Last of the series are the foundations of a temple *in antis*, built of local limestone, which M. Homolle identifies as the temple of Athena. Near it are two smaller buildings, one of which may have been a chapel of the hero Phylakos, whose precinct is mentioned by Pausanias.

A museum is being built for the antiquities of Delphi at the expense of

Madame Syngros, in fulfilment of a promise made by her late husband, the Athenian banker, whose liberality also provided a museum at Olympia. It will be ready in the course of next year.

Meanwhile the French School has undertaken another important enterprise, the excavation of the famous temple of Athena Alea at Tegea. The ruins, which were partly explored in 1879 by Dörpfeld and Milchhöfer, are covered by houses and gardens belonging to the village of Piali. The owners are being expropriated by the Archaeological Society. In the first season's work (November 1900, to February 1901) Mr. Mendel cleared all that remains of the east front, some fallen columns, the stereobate and the inclined plane leading up to it. Some fragments of the pediment sculptures have come to light, including the torso of a woman in a short chiton, no doubt Atalante, striding forward with uplifted arm, a head of Heracles in rather bad condition, and that of a hound. Besides these there is a female head in remarkably good preservation, which seems not to belong to the pediments. Can it be the head of that Hygieia by Scopas which is known to have stood in the temple? Pausanias describes it as of Pentelic marble and the newly-found head is of Parian, but the difficulty is not insuperable. Several characteristics, the treatment of the hair, the broad bridge of the nose, and a certain asymmetry in the features, are in favour of the ascription to Scopas or his school, while others, in particular the disproportionately small mouth and chin, and the charm and individuality of the expression, seem to indicate that the subject is a beautiful mortal rather than a goddess.

Among the architectural fragments are parts of a frieze with magnificent acanthus-scrolls, which mark an interesting stage in the development of the Corinthian order and suggest that the subsequent popularity of such friezes in Asia Minor may have been due to the genius of Scopas, the sculptor-architect who, as Mr. Mendel points out, himself worked on both sides of the Aegean. The Ionic columns mentioned by Pausanias have not been found in the temple, but may have formed a portico round the precinct. The soil beneath the foundations contains geometric pottery and a quantity of small bronzes like those found in the lower strata at Olympia and the Heraion. Mr. Mendel will continue the excavations in October.

The American School has broken fresh ground at Oeniadae on the coast of Aetolia. Messrs. Forman, Powell, and Sears conducted the work with private funds. They ascertained the plan of the theatre, which had about twenty-five rows of seats partly cut in the rock, eleven *cunei*, and an orchestra fifteen metres in diameter. The lower seats yielded a number of inscriptions recording the emancipation of slaves. The ancient docks noticed by several travellers beside the river were examined and proved to be winter shelters for triremes, similar in ground plan to the well-known slip-houses at Piraeus, but differently constructed, being quarried out of the rocky bank. There are ten parallel roller-ways for hauling up the ships and raised gangways between them on which column-bases are still in place,

showing that the whole was roofed over. Work had also been begun on a circular fountain-house with baths and wash-houses attached, when bad weather stopped the excavations by flooding the surrounding fens.

The excavations at Corinth were continued from the agora towards the Temple of Apollo, but on a smaller scale than usual. The base of a statue by Lysippus was discovered, a tantalising reminder of the former wealth of the site. There must be lean years in every great excavation, above all when the site is so deep and difficult as this at Corinth. But the results already obtained are so important, especially the unexpected discovery of the fountains of Pirene and Glauke, that it would be a serious misfortune to archaeology were the excavation to languish for want of funds. In spite of the great depth it has not been found practicable to work by means of tunnelling. A most serious mechanical difficulty is the fact that the whole site teems with water, and that old water-rights have to be safe-guarded at every turn.

The clearing-out of the caves beside the Propylaea has been followed by work in two others of the sacred grottoes, which were so common in Attica. Mr. Charles Weller and some other members of the American School have excavated the well-known cave near Vari on the southernmost spur of Hymettus, where inscriptions and reliefs attest that, within the narrowest limits, the Nymphs and the Graces, Pan, Apollo Hersos, and even Cybele, were worshipped side by side. The entrance is by a well-like opening from above, and the floor slopes downwards. The debris accumulated at the lower end yielded no less than seven sculptured reliefs, some inscriptions, and a quantity of pottery and coins. The earliest inscriptions date from the sixth century B.C., the reliefs and much of the pottery from the fifth and fourth, when it became the custom to dedicate red-figured *loutrophoros* vases here, possibly because the water of the little spring within the cave was in request for ceremonial purposes. To this period, when the cave was at the height of its vogue, belongs the pretty story which tells how the infant Plato was one day laid by his parents in a thicket of myrtles on Hymettus while they went to make offerings to Pan and the Nymphs and Apollo of the Pastures; returning they found that a swarm of bees had settled on the child's lips, an omen of his future eloquence. After the fourth century the popularity of the sanctuary seems to have declined, to be revived under the Lower Empire. Judging from the coins, of which great quantities were found, Mr. Weller believes that it attracted worshippers until far into the fifth century, when the reliefs seem to have been shattered by Christian iconoclasts.

Another cave of Pan and the Nymphs in a still more romantic situation, the so-called *Λυχνόσπηλιὰ*, a narrow cleft high in the precipitous wall of one of the gorges which descend from Parnes towards the Attic plain, is being explored by Mr. Skias on behalf of the Greek Archaeological Society. It was looted about 1895 by the peasants of Chasià, at the instigation of an Athenian dealer, but they were unable to make much of the deep stalagmite in the

interior, which Mr. Skias is now breaking up with the help of gunpowder. The work is rendered difficult by the conformation of the cave, which is 200 feet long, with a narrow entrance that admits only one person at a time. Some sculptured reliefs, a miniature gold couch, and a gold grass-hopper were among the objects found last autumn, and the firstfruits of the present season include a jug of striped blue glass, a fine, though late, red-figured *aryballos* (Aphrodite and Eros with gilded accessories), and a gold ring with cornelian intaglio representing a bee.

I shall mention here out of its proper context a small shrine, discovered in Aegina by the Munich Expedition. At a spot called *Τρυπητή*, half an hour north-east from the temple of Aphaca, on the left bank of a torrent, a deep recess has been hewn out of the rock; to right and left are Ionic columns, also rock-hewn, though the bases and capitals have been worked separately and inserted, supporting an entablature, so that the whole takes the form of a little temple-front. Nothing was found to determine the dedication, but it is highly probable that this shrine, practically in the stream-bed, was a *Nymphaion*. The architectural forms point to the Hellenistic period, but there are remains of an older *acdicula* close by.

The most important of the statues found off Anticythera have been described in these pages by Mr. Cavvadias. It seems worth while to give some particulars of the circumstances under which they are being recovered. The sunken ship lies on a sandy bottom close under the rocky north coast of Anticythera, quite near the little town. She must have struck and gone down without breaking up, for her frame holds together and marks out the area within which the search is being carried on. The statues lie closely packed one upon the other, in a mass extending along the middle of the hold. One report makes the heap four metres deep. This may be exaggeration, but the number of statues already brought up almost warrants it. The bronzes found at the beginning of the search had naturally been stowed on the top of the heavier marbles. The depth is over thirty fathoms.

Almost all the marbles are hopelessly corroded by the action of the sea-water, and many have been crushed and broken by the fall of huge rocks which from time to time detach themselves from the cliff above. The statue of a crouching boy, which was figured in Mr. Cavvadias' article, is the only piece that is tolerably well preserved. The larger masses, such as the copy of the Farnese Heracles and a series of three or four horses, have naturally kept their general proportions better than the smaller and more slender figures. As one sees them ranged along the two sides of an outer gallery of the Museum, these shrunken, discoloured forms, forty or fifty in number, make one of the most ghastly collections that can be imagined. One thing seems clear, that the majority are shop-copies, made for export, not original works carried off from temples or public places. We cannot decide with certainty from what port the cargo was shipped, but it is highly probable that in the first century before our era, the period to which the minor objects found in

the wreck seem to belong, Athens was still the centre from which copies of Greek works of art were supplied to Roman amateurs.

The bronzes may belong to a different category. A little statuette that has quite recently reached Athens is still attached to its base, a simple plinth of dark red marble. The right arm is missing, so that the motive cannot be determined with certainty, and the surface is much injured, but it was plainly a little masterpiece. It represents a young athlete standing with both feet firmly planted and the shoulders thrown back, nearly in the attitude of the discobolos of Naucydes.

The other objects recovered from the wreck include several score of amphorae, one inscribed in Roman numerals LIV, a quantity of earthenware flasks with slender neck and broad squat body, which must have contained part of the ship's provisions, wine, oil, and the like: plates of an Arretine-like ware, so far without makers' stamps: bowls of striped and flowered glass, some of which to the great credit of the divers have been extracted whole: and a pretty hemispherical glass vase, decorated in relief with an olive-leaf pattern. The latter can hardly have been part of the furniture of the ship; the cargo must have included a number of minor *objets d'art*. Under this head may be classed a gold earring, set with pearls, with a pendant in the form of a tiny Eros, crowned with a wreath and holding a lyre.

The Hermes has not yet been pieced together. The head, which was at first described as that of a boxer, has now been cleaned, and proves to be a fine Hellenistic portrait, certainly not of an athlete, rather perhaps of some semi-Hellenic king. It represents an elderly man with long and somewhat unkempt hair and beard, wrinkled brow, long nose of the modern Greek type, and genial expression. The eyes were enamelled, but are much corroded.

The divers, natives of Syne, are still at work, and do not expect to finish their task before the end of the summer.

Excavations at Alexandria are conducted at almost as great a depth as those in the sea of Anticythera, and are by no means so remunerative. But there can be no doubt that our knowledge has been extended by the work of the Sieglin expedition. The prime movers in the undertaking were Professor Schreiber, the well-known writer on Alexandrian art, and Professor Sieglin, Kiepert's successor in the chair of geography at Berlin. The latter's brother, Mr. Ernst Sieglin of Stuttgart, defrays the cost. The results obtained in 1898 are described at some length by Dr. Noack in a recent number of the Athenian *Mittheilungen*. Owing to the outbreak of plague nothing was done in the autumn of 1899, but work was resumed in October 1900 and carried on until last April under the supervision of Dr. Schiff and three others. Dr. Schiff and Mr. Fichter continued Noack's study of the ancient street-plan, sinking shafts and driving galleries at a great depth, chiefly along the Rue d'Allemagne and in a plot near the Ramleh railway-station, where they obtained ground plans of a Ptolemaic stoa and of a large Roman bath-establishment. Meanwhile Professor Thiersch of Munich and his son, Dr. Hermann Thiersch, were unravelling the complicated architectural history of

the Serapeion, no easy task in the case of a building that was restored again and again and subsequently used as a quarry for many centuries. A painted altar of the time of Ptolemy II. and a limestone sphinx were discovered here. Two cemeteries were explored, that of Hadra on the east of the city containing Hellenic graves, and that of Gabbari on the west, which is late Hellenistic and Roman. Many of the Gabbari tombs have been used twice, and some of the larger sepulchral chambers have elaborate wall decorations in a singular pseudo-Egyptian style painted over earlier designs of purely Greek character—a reversion to native traditions and motives which is perhaps echoed in some of the later Egyptianising wall-decorations at Pompeii.

In a future article I hope to deal with the results of excavations in Asia Minor, those of the German Institute at Pergamon, the Austrian Institute at Ephesus, and the Prussian Museums at Miletus. News comes that an adventurous Englishman, Mr. Robert de Rustafjaell, has begun work at Cyzicus. Mr. Kinch, the Danish explorer, has unfortunately failed to obtain a firman for Cyrene and proposes to devote his funds to a site in Asia Minor or Rhodes.

R. C. BOSANQUET.

INDEX TO VOLUME XXI.

INDEX TO VOLUME XXI.

I.—INDEX OF SUBJECTS.

A

- ABRETTENE, topography and inscriptions, 229, 230
 Abydos (Egypt), inscriptions from, 279, 280
 Acanthus-frieze from Tegea, 348
 Acropolis, *see* Athens
 Aegina, excavations 1900-1901, 345; shrine at Trypetè, 350
 Aesepeus valley (Mysia), topography, 234
 Aezanitis, inscriptions from, 229
 'African' system of tachygraphy, 242, 260
 Agrimia on Mycenaean gems, 153, 182
 Aigaleos, Mt., 47
 Albani, Villa, *see* Rome
 Albano, Gavin Hamilton's excavation at, 313, 320
 Alexander the Great and the Caspian Sea, 13; head of A. at Chatsworth, 212; various portraits, 213 f.; type of, in Roman portrait statue, 219
 Alexandria, inscriptions from, 284, 289; excavations, 1900-1901, 351
 Al Garmi on the Byzantine Themes, 70
 Al Idrisi on the Byzantine Themes, 67
 Alkimachos, *καλὸς*-name, 3, 4
 Al Mas'udi on the Byzantine Themes, 67
 Altar and temenos on Knossian pyxis, 102
 Altars, baetylic forms of, 114 f.
 Amasia, position of, 55
 Ambrakia, obelisk on coins of, 173
 Ambrosial stones at Tyre, 133
 Amisus, road to Zela from, 53; siege of, 56
 Anatolikoi, Theme of, 74
Andilia, 129
 Andrapa-NeoClaudiopolis, 60
 Anconic cults, transition to anthropomorphism from, 123; bisexual, 151, 167
 Animal-headed daemons in Mycenaean art, 101, 117, 168, 335, 338; vases borne by Kefti tributaries, 95
 Animals, infants suckled by, 129; as supporters of sacred trees and columns, 152
 Ankh, symbols derived from, 178
 Anthemion in architecture and on crown of Argive Hera, 42
 Anticythera, *see* Cythera
 Anthropomorphic divinities with heraldically posed animals, 163
 Anthropomorphism, beginnings of, in Mycenaean religion, 123, 163
 Aphaca, temple of, in Aegina, 345
 Aphrodite, Cyprian cult of, 120, 151, 171 f.
 Apollo, bronze head at Chatsworth, 209; Cassel Apollo, 211; statue at Chatsworth and bronze statuettes in Bologna and Louvre, 217; Agyieus, 181; of Amyklæ, 120, 173, 181; Hylates, dedication to, from Koptos, 291
 Apt (Provence), portrait sculpture from, 217 f.
 Arabic lists of the Byzantine Themes, 67
 Aral Sea, ancient views of, 21
 Archaeology in Greece, 1900-1901, 334
 Ares, dedication to, from Alexandria, 289
 Argos, Hera of Polycleitus at, 30; coins with head of Hera, 34
 Ariadne, cult of, 120, 175
 Aristotle (*Oec.* i. 6) on the Greek House, 299
 Arius, R., ancient views of, 23
 Armed divinity in Mycenaean religion, 174
 Armenia Minor annexed by Mithridates, 55
 Armeniakoi, Theme of, 76
 Armour, votive, *see* Bronzes
 Arrian, his name in inscription from Hadrianeia, 232
 Arslan Kaia, Kybele with lions at, 166
 Artemis Pergaea, dedication to, from Naukratis(?), 285; Phosphoros and Enodia, dedications to, from Koptos, 291
 Ashera-cult, 133
 Ashmolean Museum, *see* Oxford
 Asklepios in Borghese gardens, 211; at Dresden, 211
 Astauene, Parthian satrapy, 29
 Athena, common worship with Poseidon-

Erechtheus at Athens, 331; A. Alea, temple of, at Tegea, 348
 Athens, Archaeology at, 1900-1901, 343; approach to Acropolis, 344; conservation of Parthenon, *ibid.*; Museums, *ibid.* See also Erechtheion

Athlete, bronze statue, found off Cythera, 207; bronze statuette, 251

Attributes, divine, worship of, 268 f.

Avunia (Mysia), inscription at, 235

Axe, double, in Diktaean Cave, 100, 111; in Mycenaean cult, 106; combined with symbol derived from *ankh*, 179; at Phaestos, 337; on column, on Cretan larnax, 341; on amphora from Gournià (Crete), 342; religious significance disputed, 268 f.; geographical distribution, 269

Axiopieithes, καλὸς-NAME, 4

B

BACCHUS, so-called, head of, in British Museum, 38, *see also* Dionysos

Baetyl, cult of, 106; in Indian dolmen-shrine, 186

Baetyl tables of offering, 113; temple represented in Mycenaean fresco, 192

Bairamitch (Mysia), inscription from, 236

Balat (Mysia), site of Hadrianeia, 231

Balearic Islands, sacred pillars in, 187

Barracco head of Alexander, 213

Berlin Museum, dedication to Herakles-Harpokrates, 283

Bethel, 112, 132

Bey keui (Mysia), site of Hadrianopolis (?), 233

Bhuta stones, 106, 188

Bithynia, Mithridates invades, 56

Bologna, bronze statuette of Apollo at, 217

Borghese Asklepios, 211

Boustrophedon Hittite inscription, 324

Boxer, so-called, bronze head of, from near Cythera, 207, 351

Bridges, Roman, in Pontus, 65

British Museum: Sculptures from Townley Collection, 306 f.; head of Polycleitan Hera, 31; Mycenaean vase from Old Salamis, 107; from Curium (*see* Corrigenda), 112; limestone altar from Cyrenaica, 115; coin of Byblos, 138; waxen book with tachygraphic writing, 242 f.; Stowe MSS. (1019, 1020), transcribed, 306 f.

Bronze head of Apollo, Chatsworth, 209; statue and statuettes from near Cythera, 205, 351; statuette of male deity and implements from Gournià, 342; votive armour from Praesos, 340; helmet with Corinthian inscription from Leukas, 342

Buccellarii, Theme of, 76

Bulls, pair of, attached heraldically to sacred pillar, 156

Busts, portrait, at Chatsworth, 225 f.

Byblos, coin with cone of Astarte in enclosure, 138; sacred tamarisk at, 146
 Byzantine Themes, 67

C (*see also* K)

CABIRA, Mithridates at, 56; road to Eupatoria, 57; Fabius Hadrianus besieged at, 58; importance of, 60

Cairo, *see* Ghizeh Museum.

Calvinus, *see* Domitius Calvinus

Cambridge (Fitzwilliam Museum), inscription at, 291

Campana Alexander, 214

Canopic figures on Alexandrian stele, 289

Capitol, *see* Rome

Capitoline Plan, Roman house on, 302

Cappadocia, kleisourarchia of, 75

Carthaginian stele with sacred column, 144; triunities of pillars, 138

Caspian Sea, ancient views of, 10

Cassel Apollo, treatment of hair in, 211

Castel Guido, Gavin Hamilton's excavations at, 317

Caves, sacred, in Crete, 99; in Attica, 349

Cellular baetyl shrines, 189 f.

Chakdia, Theme of, 76

Chariot, four-horsed, on Chatsworth relief, 228

Charsianon, kleisourarchia of, 75

Chatsworth House, sculptures at, 209

Chavdyr Hissar (Mysia), inscription from, 229

Columns, octagonal, at Troezen, Megara, Aegina, 345; tapering downwards, 187, 195; worship of, *see* Pillars

Commodus, inscription in honour of, Ghizeh Museum, 276

Conch-shell in ritual, 142

Constantine Porphyrogenetos on the Byzantine Themes, 67

Corinth, excavations in 1900-1901, 349

Cornazano, Gavin Hamilton's excavation at, 313, 320

Crescent as symbol of moon-goddess in Mycenaean art, 169, 185

Crete, Mycenaean Tree and Pillar Cult in 99; primitive pottery from, 78; coin of the Koinon with altar, 116; excavations 1900-1901, 334

Crouching marble figure, found off Cythera, 207

Crown, *see* Stephane

Curium, Mycenaean vase-fragment from, 111, 112 (*see* Corrigenda)

Cypresses beside shrine, 183; wood of, used for columns at Knossos, 195

Cypro-Mycenaean cylinders with rayed pillars, 148

Cyrenaica, baetyl altar from, 115

Cythera, finds of statuary from sea near, 205, 350

D

DADASA, Mithridates' victory at, 58
 Daenouos, animal-headed, in Mycenaean art, 101, 117, 168, 335, 338
 Daulia, road to Delphi from, 49
 Dazimonitis, plain of, 53
 Dedications to deities, nature of, 271
 Delos, houses in, 298
 Delphi, Mycenaean antiquities from, 347; excavations in 1900-1901, *ibid.*; road to Daulia from, 49
 Deluge myth, 8
 Deme-names, Alexandrian, 278
 Demosthenes *adv. Euergum et Mnesibulum*, description of Greek house in, 299
 Devonshire, Duke of, sculptures belonging to, 209
 Diadem of Polycleitan Hera, 40
 Dictaeon Cave (Crete), excavation of, 100, 111; Kamares pottery from, 78, 93; table of offering, 114; dedications, etc., 271-274
 Dimini (Thessaly), prehistoric remains near, 342
 Dionysos, head at Chatsworth and statues at Madrid and Paris, 215; *see also* Bacchus
 Docks at Oeniadae, 348
 Dolmen-shrines, 185
 Domitian, inscription from Egypt of his reign, 285
 Domitius Calvinus defeated by Pharnaces, 59
 Doorways, Mycenaean sacral, 141, 170, 181
 Doryphoros of Polycleitus, 35, 36; copy at Chatsworth, 212
 Double-axe, *see* Axe
 Double-bodied animals on Mycenaean gems, 159
 Dove in Mycenaean cult, 104, 105; shrines with doves from Mycenae, 123, 135, 141, 185, 191; dove-vase from Knossos, 78, 104
 Draught-board from Knossos, 335
 Dresden Asklepios, 211
 Dual Pillar-worship in Mycenaean religion, 169 f.

E

EARTH-SPIRIT, worship of, 4-6
 Egypt, Greek inscriptions from, 275 f.; connexion with Crete, 335
 Egyptian aniconic cults, 146; palmette-capitals, 147; influence on Cypro-Mycenaean cylinders, 149; heraldically-posed animals, 152, 162; origin of pillar and guardian animals type, 162; religion, Greek treatment of, 276, 282
 Elis, coins with Polycleitan Hera, 35, 44
 Enater, 234
 Epimetheus and Pandora, 1
 Eratosthenes on the Oxus and Caspian, 13
 Erechtheion, Poseidon's trident-mark in,

325; his 'spring,' *ibid.*; crypt under North Porch, 328
 Erechtheus-Poseidon, joint cult of, 331
 Eschara in Greek House, 303
 Eteobutadae in the Erechtheion, 331, 332
 'Eteocretan' inscription from Praesos, 340
 Eupatoria captured by Catullus, 56; road thence to Cabira, 57
 Euphranor, Alexander-portrait in style of, 214
 Euphrates frontier of the Roman Empire, 61
 Euripides' *Alcestis*, theory of Greek House illustrated from, 301

F

FABIUS HADRIANUS besieged at Cabira, 58
 Faustina the Elder, portraits of, at Chatsworth, 225
 Female portrait-figures under Early Empire, 221
Ficus Ruminalis, 128
 Fig-tree, sacred, on Knossian pyxis, 101; in later Greek cults, 104
 Fleur-de-lys capitals (Egyptian), 147; pillar with confronted sphinxes, 155
 Frescoes at Knossos, 136, 192, 335, 336; at Kato-Zakro, 339
 Fruit-trees, sacred, 177, 182

G

GABBARI (Alexandria), Hellenistic and Roman cemetery at, 352
 Gabii, Gavin Hamilton's excavations at, 318
 Galen's description of farm-house, 303
 Gateways, Mycenaean sacral, 141, 170, 181
 Gaul, Southern, its art under Early Empire, 219 f.
 Genzano, Gavin Hamilton's excavations at, 313
 Geometric pottery from Praesos, 340
 Ge-Pandora, 4
 Ghizeh Museum, Greek inscriptions in, 275 f.
 Giganteja (Gozo), 123, 199
 Gilgames type in art, 152, 164
 Glass plaques, impressed, from Mycenae, 117; vase from sea near Cythera, 351
 Goats, sacred, 153, 182; as supporters of sacred tree, 153
 Gold plate covering reliefs or intaglios in Mycenaean art, 101, 102
 Goulas (Crete), Mycenaean shrine at, 100; lentoid gem from, 154
 Gournià (Crete), Mycenaean town at, 341
 Gozo, remains in, 123, 199
 Graces and Seasons on crown of Argive Hera, 41
 Grapes and corn-ears in relief on Kamares vase, 84

Grave-relief of Herennia Syriska (Chatsworth), 225
 Griffins supporting sacred pillar, 158
 Grottaferrata, tachygraphy of, 242, 259
 Gumenij (Mysia), site at, 234
 Gymnasiarchs in Egypt, 284
 Gyunuk Euren (Mysia), inscription from, 229

H

HADRA (Alexandria), Hellenic cemetery at, 352
 Hadrian, Villa of, Gavin Hamilton's excavations at, 307
 Hadrianeia (distinct from Hadriani), site of, 231
 Hadrianotherae, site of, 232, 233
 Hagar Kim, remains at, 123, 197
 Hagios Georgios, the Homeric Nerikos, 342
 Hair, treatment of, on herm at Chatsworth, 210; on Polycleitan head of Hera, 39; on heads of Alexander the Great, 213; on head of Dionysos at Chatsworth, 217; in portraits of first century A.D., 221
 Haliki, sacred pillars on vase from, 139
 Hamilton, Gavin, his letters to Charles Townley on his excavations, 306 f.
 Hammer in Pandora-myth, 5
 'Hammerers' of Sophocles, 6
 Harpocrates, development of his worship, 277
 Harpocrates-Herakles, dedication to, 283
 Hathor-cult, influence on Mycenaean and Anatolian religion, 167
 Hathoric pillars, 149, 150
 Hebe of Naucydes, 33
 Hera of Polycleitus, 30 f.; aspects of the goddess, 32; dedication to, in Egypt, 285
 Heraeum near Argos, 30; sculptures of Polycleitan style from, 36; Mycenaean gem from, 109
 Herakles-Harpocrates, dedication to, 283
 Herakles-Hermes, dedication to, in Ghizeh Museum, 282
 Herakles Kallinikos, dedication to, from Koptos, 291
 Heraldic pose of animals in early art, 152
 Herennia Syriska, grave-relief of, 225
 Herm, bearded, at Chatsworth, 209
 Hermes, head at Chatsworth, 214; in Villa Albani, 215; statue in Vatican, 215: bronze statue of (?), found off Cythera, 207; dedication to, in Egypt, 286; relation with Pandora, 1
 Hermes-Herakles, dedication to, in Ghizeh Museum, 282
 Hermes Krauros, Cave of, bronze statuette from, 125
 Herodotus on the Caspian Sea, 12
 Hesiod's story of Pandora, 1
 Hestia in Greek house, 303

Himera, coins with Hera of Polycleitus, 35
 Hippopotamus-goddess, lion-headed daemons derived from, 169
 Hittite altars, 115; symbols derived from *ankh*, 178; inscription from Karaburna, 322
 Homer quoted on stele from Alexandria, 290
 Homeric House, 294 f.
 'Horns of consecration' in Mycenaean cult, 102, 107, 116, 135, 137, 154, 183, 184, 189, 191, 196
 Horse symbolizing heroic state, 226
 House, the Greek, 293; Homeric, 294; Mycenaean, in Crete, 339, 341
 Hyakinthos, 120
 Hypaethral shrines in Mycenaean religion, 100, 123

I

IBN AL FAKIH AL HAMADHANI on the Byzantine Themes, 67, 72
 Ibn Khurdadhbah on the Byzantine Themes, 67
 Idaean Cave, horned cultus-object of pottery from, 136; crystal lentoid with tree-worship from, 142
 Idiologus of Egypt, 291
 Idolino, bronze resembling, found off Cythera, 206
 Idols, prehistoric, from near Volo (Thessaly), 343; Mycenaean, from Aegina, 346
 Impaled triangle, Mycenaean symbol, 154, 159
 Indian trade with Syria, 18
 Inscriptions: from Acropolis with tachygraphic system, 245; from Aegina, with name of Aphaea, 346; from Egypt, 275 f.; from Mysia, 229 f.; Hittite, from Karaburna, 322
 Iris capitals, Egyptian, 147
 Iris valley (Pontus), 53
 Isis, development of cult and epithets, 276, 277
 'Italian' system of Tachygraphy, 242, 259
 Ithaca, the Homeric, 342

J

JACOB'S pillar, 112, 132
 Jaxartes, ancient views of, 15
 Juktas, Mt. (Crete), 121
 Juno Sospita, on relief at Chatsworth, 227
 Jupiter Dolichenus, 109

K (see also C)

KAMARES ware from Knossos, 78; technique of, 80; from Phaestos, 338; from Kato-Zakro, 338; from Petras, 341
 Kappotas, Zeus, 118

Karaburna, Hittite inscription and fortress at, 322
 Karachalda (Mysia), inscription from, 233
 Kato-Zakro (Crete), excavations in 1900-1901, 338
 Kaulonia, sacred tree on coins of, 128
 Kebsud (Mysia) not Hadrianutherae, 233 ; inscription from, 234
 Kephala (Knossos), Kamares ware from, 79
 Keraunia, 118
 Keraunos, Zeus, 271
 Khavsa (Pontus) = Neapolis ? 61
 Khonsu identified with Herakles, 283
 Khyan, alabastron-lid with his name from Knossos, 335
 Khydyrlar (Mysia), hot springs at, 235
 Kibyrriaotai, Theme of, 71
 Knossos, pillar of the double axe at, 110 ; its religious significance disputed, 268 f. ; signs on Palace walls, 273 ; fresco with 'horns of consecration,' 136 ; with façade of temple, 94 ; steatite pyxis from, 101, 103 ; clay seal-impression with sheep and infant, 129 ; excavations 1900-1901, 334 ; Kamares ware from lower town, 78 ; coins with Hera of Polycleitus, 35
 Koptos, sanctuary of Min at, 142, 146 ; inscription from, 291
 Kriosphinx, double-bodied, on Mycenaean gem, 159
 Kronos, stone swallowed by, 113
 Kudama on the Byzantine Themes, 67
 Kurshunlu (Scepsis), inscriptions from, 235 f.
 Kybele and lions at Arslan Kaia, 166
 Kydonia (Crete), lentoid gem from, 163

L

LABRANDA, Labrandos, meaning of names, 109
 Labyrinth, meaning of, 109 ; connexion with *labrys* disputed, 268 f.
 Lansdowne House, sculptures from Gavin Hamilton's excavations in, 310 f.
 Laodicea (Pontus), 60
 Larnax, painted, from Palaioakastro, 341
 Legio XIII. Gemina, gravestone of a chiliarch of, 291
 Legions on the Euphrates frontier, 61
 Leochares, portrait of Alexander in his style, 214
 Leto Euteknos, dedication to, from Koptos, 291
 Leukas, excavations in, 342
 Libations, Mycenaean daemons making, 117 ; table for, from Dictaeon Cave, 113
 Light-god of Crete and Arcadia, 173
 Ligortino (Crete), steatite lentoid gem from, 185
 Lion, double-bodied, on Mycenaean gem, 159 ; pair of lions, attached to sacred pillar, 159 ; with fore-feet on baetyl base, 161 ; supporting Egyptian solar disk, 162 ;

supporting figure of divinity, 163 ; of daemon, 168 ; lions' gate at Mycenae, 156 ; the type in art, 157, 160 ; lion goddess on Mycenaean gems and Cyprian Mycenaean cylinders, 166 ; lion-headed daemons, 101, 117
 Lucullus and Mithridates, 56
 Lunar symbol (bucranium) in Mycenaean cult-scenes, 169, 172
 Lychnospeliā, cave of, 349
 Lycomidae at Phlya, 7
 Lycus valley (Pontus), 54
 Lysias *de caede Eratothenis*, description of Greek house in, 300
 Lysippus, his portraits of Alexander, 213, 214

M

MACEDONIA, Theme of, 73
 Madrid, statue of leaning Dionysos at, 215
 Male and female deities in aniconic cult, 151, 167
 Maltese islands, megalithic sanctuaries of, 196
 Marbury Hall, sculptures from Gavin Hamilton's excavations at, 312 f.
 Margam, sculptures from Gavin Hamilton's excavations at, 310
 Margus, R., ancient views of, 23
 Marmaria (Delphi), excavations at, 347
 Maššēba-worship, 132
 Massilia, influence of, on art of Southern Gaul, 220
 Melde (Mysia) site of Miletropolis, 237
 Melitene, legionary camp at, 62
 Melos, Kamares ware from, 94
 Mendes, inscription from, 291
 Mesauloe, 301
 Metallic prototypes of Kamares ware, 82, 95 ; borne by Kefti tributaries, 95
 Meteoric element in baetyl stones, 118
 Milato (Crete), painted sarcophagus from, 174
 Milestone from Pontus, 62
 Miletropolis (Mysia), site of, 237
 Min, the God, 142, 146
 Minorca, pillared chambers in, 187
 Mithridates Eupator, campaigns of, 55
 Monte Cagnoio, Gavin Hamilton's excavations at, 313, 320, 321
 Mother-Goddess, lion-cult of, 167
 Murena, war with Mithridates, 56
 Mycenae, plan of Palace at, 296 ; lions' gate tympanum, 157 ; objects from : Gold signets, 108, 155, 159, 177, 182, 183, 189, 190 ; electrum signet, 175 ; gold-plated silver ring, 184 ; crystal signet, 156 ; various lentoid gems, 154, 158, 159, 168 ; amygdaloid gem, 164 ; cylinder with pillar-worship, 141 ; impressed glass plaques, 117 ; gold shrine with doves, 191
 Mycenaean antiquities discovered 1900-1901, 334 f., 346, 347 ; pottery in Crete, its rela-

tion to Kamares ware, 97 ; tree and pillar cult, 99 f. ; script, 335, 337
 Myron, works of the school of, 211, 215
 Mysia, notes from (inscriptions and topography), 229

N

NAUCYDES, discobolos of, statuette resembling, 351 ; Hebe of, 33
 Neapolis (Pontus), position of, 60
 Negroes' heads, necklace with (Knossos), 33
 NeoClaudiopolis, site at Vezir Kenpru, 60
 Neolithic settlement at Knossos, 336 ; near Volo, 343
 Nerikos, the Homeric, 342
 Nezero, silver statuette from, 125, 126
 Nicomedes of Bithynia, war with Mithridates, 56
 Nicopolis (Pontus), battles at, 59 ; founded by Pompey, 60
Niger lapis, 130
 Nubid type, male head of, at Chatsworth, 271
 Nora (Sardinia), triple pillar-shrine on stele from, 139
 Nusb-worship, 133
Notae Tironianae, 238 f.

O

OBELISK-FORM of the Sun-god, 173
 Obsidian, Melian, at Knossos, 94
 Octagonal columns at Troezen, Megara, Aegina, 345
Oedipus Coloneus, the abduction incident in, 45
Oedipus Tyrannus, the Triodos in, 48
 Oeniadae, excavations 1900-1901, 348
 Oil, anointing of stones with, 132
 Opsikion, Theme of, 74
 Optimatoi, Theme of, 74
 Ornament on Kamares ware, 82
 Osiris of Abydos, identification with Sarapis, 277, 280 ; presentation of mummy to O. and Isis by Anubis, 280
 Ostia, Gavin Hamilton's excavations at, 314, 320
 Oxford, Ashmolean Museum, Pandora vase, 1
 Oxus, ancient views of, 10

P

PAIRS OF DEITIES, male and female, in Mycenaean religion, 175
 Palace at Knossos, 334 ; at Mycenae, 296 ; at Phaestos, 337 ; at Tiryns, 295 ; at Troy, 304
 Palaiokastro (Crete), lentoid gem from, 154 ; ancient remains at, 341
 Palmette pillars, Egyptian, 147
 Pan and Nymphs, caves of, 349

Pandora, story of, in art, 1
 Pantanello, Gavin Hamilton's excavations at, 307, 319 f.
 Paphlagonia, Theme of, 73
 Paphos, aniconic cult at, 151, 171
 Papyri, tachygraphic, 243 f.
 Paris, Louvre : Alexander-herm, 213 ; Campana Alexander, 214 ; Richelieu Bacchus, 215 ; bronze statuette of Apollo, 217 ; stele of the God Salm, 137
 Parthenon, 'conservation' of, 344 ; inscription in honour of Nero on, *ibid.*
 Parthia, Chinese accounts of, 27
 Pathyrite nome, honorary decree in honour of a polemarch of, 282
 Patrocles and the Oxo-Caspian trade-route, 10
 Pausanias on the Hera of Polycleitus, 33 ; on the Erechtheion, 330
 Pella, grave-relief supposed to come from, 225-227
 Peristyle of Greek house, 302
 Petras (Crete), ancient remains at, 341
 Phaestos, signs on Palace walls, 273 ; excavations 1900-1901, 336
 Phanaroea plain (Pontus), 53
 Pharnaces, campaigns of, 55
 Phazemon (Pontus), 61
 Pheidias, works of the school of, 211 ; his treatment of story of Pandora, 1, 2 ; of Aphrodite, 2
 Pherae, coins with double axe as symbol, 270
 Philotheos on the Byzantine Themes, 67
 Phlya, worship of Ge at, 5 ; of Demeter *Ἀμφιδώρα*, 6 ; Lycomidae at, 7
 Phylakopi, Kamares ware from, 94
 Phyle, pass of, 46
 Pillars, cult of, Mycenaean, 99 f. ; 'pillar of the house', 143, 187 ; structural functions of sacred pillars, 144 ; pillar-shrines at Knossos, 111 (disputed, 272) ; at Phylakopi, 111 ; at Phaestos, 337 ; in modern Macedonia, 200 ; Mycenaean daemons pouring libations on pillars, 117 ; pillars with heraldically posed animals, 154 ; replaced by figures of divinities, 163 ; twin, male and female, 169
 Pithos of Pandora, 1
 Plane-tree, sacred, 127
 Plato's description of house of Callias (Protagoras), 298
 Pliny on the Oxus and Caspian, 14
 Polycleitus, Hera of, 30 ; characteristics of his style, 35 f. ; Chatsworth copy of Doryphoros, 212 ; statuettes of his style, found off Cythera, 206
 Pompeii, plan of house at, 297, 302 ; sacred trees at, 128
 Pompey's war with Mithridates, 59 ; he organizes Pontus, 60
 Pontus, roads in, 52 ; organization by Pompey, 60 ; milestones in, 62
 Portals—*see* Gateways

Porta Marina, Gavin Hamilton's excavations at, 315

Portrait statues and busts at Chatsworth, 217 f.

Portraiture under the Early Empire, 219 f.

Poseidon's trident-mark in the Erechtheion, 325 ; his joint cult with Erechtheus, 331 ; dedication to, from Alexandria, 289

Pottery from Crete, primitive, 78, 33 f. ; pre-Mycenaean, from near Volo (Thessaly), 343

Praesos, excavations at, 1900-1901, 339

Praxitelean statue of Dionysos at Madrid, 215 ; head at Chatsworth, 216

Prodomos type of Greek house, 303, 304

Prometheus at the birth of Pandora, 1 ; of Athena, 9

Propylaea on temple-plateau, Aegina, 345

Ptolemy XIII. and Kleopatra-Tryphaena, inscription of reign of, 282

Q

Quadrata signa of Polycleitus, 36

R

RAYED PILLARS on Cypro-Mycenaean cylinders, 148, 172

Reliefs, Mycenaean, from Knossos, 336 ; Greek, at Chatsworth, 225 ; Graeco-Egyptian, 279, 286 f.

Religion, Mycenaean, 99 f. ; Greek, symbols not worshipped in, 269

Rhea Silvia, 129, 130

Ririt, *see* Hippopotamus-goddess

Roads : from Athens to Thebes, 46 ; from Thebes to Delphi, 49 ; in Pontus, 52

Roman House on Capitoline Plan, 302

Roma Vecchia, Gavin Hamilton's excavations at, 316, 320

Rome, Museums in : Capitol, head of Alexander, 213 ; portrait group (Gallery 56), 222, 223. Vatican, statue of Hermes, 215 ; sculptures in Mus. Clementino from Gavin Hamilton's excavations, 308 f. Villa Albani, sculptures from Gavin Hamilton's excavations in, 310 ; head of Hermes, 215

Romulus, tomb of, 130

Ruminal fig-tree, 128

S

ΣΑΚΗΑ (Xois), inscription from, 276

Salamis (Old) in Cyprus, Mycenaean vase from, 107

Salm, stele of, 137

Samosata, legionary camp at, 62

Sarapis, dedications to, in Egypt, 275, 279 ;

epithets of, 276 ; development of his worship, 277

Satala, legionary camp at, 62 ; remains, 65

Scepsis, inscriptions from, 235

Schisté Hodos, 49

'Schnabelkannen' from Knossos, 83

Scopas, sculpture of his school from Tegea, 348

Script, Mycenaean, 335, 337, 339

Sculpture, archaic, from Praesos, 340 ; from Aegina, 345 ; from Tegea (temple of Athena Alea), 348 ; at Chatsworth House, 209 f. ; from off Cythera, 205, 350

Seals, Mycenaean, from Knossos, 335 ; clay impressions of, from Kato Zakro, 339

Seated portrait figures of Roman women, 223

Sebasteia (Pontus)=Talaura ?, 59

Seleucus and the Caspian Sea, 13

Seleukeia, kleisourarchia of, 75

Semitic parallels with Mycenaean religion, 130

Senballaouin (Mendes), inscription from, 291

Seraijik (Mysia) inscription from, 236

Serapeion at Alexandria, 352

Sexes, distinctive colouring of, in fresco at Knossos, 192

Shelburne, Earl of, sculptures obtained by Gavin Hamilton for, 310 f.

Shiarai Hills, India, dolmen shrines in, 186

Shield, Mycenaean, in cult-scenes, 179, 180 ; shield-bearing god, 122, 174 ; shields fastened on Parthenon architraves, 344

Shorthand, *see* Tachygraphy

Shrines, Mycenaean, 100 ; dimensions of 122, 192, 196 ; tripartite, 123 ; portal-shrines, 182 ; dove-shrines, 123, 135, 141, 185, 191.

Sigla of tachygraphy, 247, 263

Signs on walls of palace at Knossos and Phaestos, 273

Sikel date of Maltese megalithic monuments, 198

Sima, marble, from Argive Heraeum, 42

Snake of Acropolis at Athens, 329, 332

Solar divinities, connection of aniconic pillars with, 162, 169, 172 ; heraldically posed lions supporting solar disk, *ibid.*

Sophocles : abduction incident in *Oed. Col.*, 45 ; the Triodos in *Oed. Tyr.*, 48

Sphinxes as supporters of sacred pillars, 155, 158

Spiral ornament at Giganteja, Gozo, 199

Stairs (stone) at Knossos, 335 ; at Phaestos, 337

Statues to Roman Emperors in Egypt, expenses of, 278

Steatopygous figures from Malta, etc., 200

Stelae as habitations of the dead, 119 ; with reliefs of Osiris, Isis and Anubis, with mummy, 280

Stenography, *see* Tachygraphy

Stephane of Polycleitan Hera, 40

Stone axes from near Volo, 343
 Stones, worship of, 117, 132
 Strabo on the Oxus and Caspian Sea, 13
 Sulla, loss of his ship conveying works of art, 208
 Sundorne Castle (Shropshire), statue of Venus at, 312
 Sun-god represented as pyramidal pillar, or obelisk, 173
 Sword, worship of, 107
 Symbols, worship of, 268 f.; on blocks at Knossos, 273; at Phaestos, 273, 337
 Syriska (Herennia), grave-relief of, 225

T

TABLES of offering, baetylic, 112
 Tablets with Mycenaean script, 335, 337, 339
 Tachygraphy, old Greek, 239 f.
 Tafak (Mysia), inscription from, 231
 Talaura, position of, 58, 59; coins of, 59
 Talaya, Theme of, 71, 72
 Talyots, 187
 Taper, downward, of Mycenaean columns, 187, 195
 Tapurians, Parthian satrapy, 29
 Tarsius valley (Mysia), topography of, 234
 Tash keui (Mysia), inscription from, 230
 Tegea, Mycenaean antiquities from, 347; excavations at, 348
 Teima (N. Arabia), stele from, 137
 Tekekiöi, Macedonia, modern cult of sacred stone at, 202
 Tenedos, double axe on coins of, 108, 270, 271
 Terracotta head from Argive Heraeum, 43
 Tessarakontapechys, 77
 Theatre at Oeniadae, 348
 Thebes, roads from Athens to, 46
 Themes of Byzantine Empire, 67
 Themiscyrra, plain of, 53; captured by Lucullus, 56
 Tholos at Delphi, 347
 Thoü identified with Hermes, 283
 Thrace, Theme of, 73
 Thrakesioi, Theme of, 74
 Throne-cultus, Reichel's theory of, 189
 Thunderbolt, as attribute of Zeus, 269; worship of, 271
Tironianae, Notae, 238 f.
 Tiryns, plan of Palace at, 295; frieze, analogue to, at Knossos, 194
 Tofak (Mysia), inscription from, 231
 Tombs of deities, 120, 181
 Tor di Colombaro, Gavin Hamilton's excavations at, 311, 319, 320
 Townley, Charles, Gavin Hamilton's letters to, 306 f.
 Trade-routes from the Caspian to India, 10
 Tree Cult, Mycenaean, 99 f.; Semitic, 132
 Trees, legends of moving, 134; sacred, in shrines, 170, 176 f.; used in construction,

145; triple groups of, 141 f.; with heraldically posed animals, 153
 Triarins, war with Mithridates, 58
 Trident-mark, Poseidon's, in the Erechtheion, 325
 Triglyphs, Mycenaean, 194
 Trilith, sanctity of, 100
 Trinities of Trees and Pillars, 138; of deities, 140
 Triodos in the *Oedipus Tyrannus*, 49
 Triple trees, sacred, 183
 Tripods, baetylic, 117, 118
 Trireme-docks at Oeniadae, 348
 Troy, plan of house in second city, 303, 304
 Trypetè (Aegina), shrine at, 350
 Tryphaena, wife of Ptolemy XIII., 282
 Turreted crown of Hera on Argive coins, 41; of Kybele, origin of, 167
 Twin pillars representing deities, 127, 140, 145
 Twins, Wolf and, 129

V

VAPHEIO Tomb, gem from, 101; gold signet, 106
 Vari (Hymettus), cave of Pan, Nymphs, &c., 349
 Vase, r.f., with birth of Pandora, 1; *see also* Pottery
 Vatican, *see* Rome
 Vezir Keupru (Pontus), site of NeoClaudio-polis, 60
 Vitruvius on the Greek house, 300, 301
 Volo (Thessaly), prehistoric settlement near, 343
 Votive models of armour from Praesos, 340

W

WATERING of sacred trees, 100, 101
 Waxen book with tachygraphic writing in British Museum, 242 f.
 Wings on the head of Hermes, 214, 215
 Wolf and Twins, 129
 Women's apartments in Greek House, 294 f.
 Wrestler (?), crouching, marble found off Cythera, 207

X

XENOPHON on the Greek House (*Mem.* ii. 8), 299
 Xenophontean Tachygraphy, 242 f.
 Xoïs, inscription from, 276

Z

ZAKRO, *see* Kato-Zakro
 Zela, road to Amisus from, 53; battle of, 59

- Zenoposeidon, 271
- Zero (Crete), lentoid gem from, 160
- Zeus and Hermes on Pandora Vase at
Oxford, 2; cave of Zeus, *see* Dictaeon
Cave; dedication to, from Alexandria,
289
- Zeus, Cretan, 113, 272; tomb of, 119; plane-
tree of, 127
- Herkeios, altar of, in Greek House, 303
- Zeus Idaeus at Scepsis, 236
- Kappotas, 118
- Keiaunos, 270
- of Labranda, his double axe, 268 f.,
272; *see also* Labranda
- Osogos, 271
- Zoocephalous figures in Mycenaean art, 101,
117, 168, 335, 338

II.—GREEK INDEX.

Ἀμφιθάλαμος, 294
 ἀνασεσύρθαι of Alexander's hair, 213
 ἀναστολή of Alexander's hair, 213
 ἀνδρών, 298, 300
 ἀνδρωνίτις, 294, 299 f.
 Ἀνησιδώρα, 6
 ἄργος λίθος, 118
 Ἀσπιωνου, Parthian satrapy, 29

Βαίτη, 112
 βαίτυλος, βατύλιον, 112
 Βασίλεια, Ἡρα, 32
 βοῦθειν with genitive, 231 ; with accusative,
 234
 βωμός = altar. 181

Γυναικωνίτις, 299 f.

Διπλοῦν οἶκημα, 332

Εἰλείθνια, Ἡρα, 32
 ἔμψυχοι λίθοι, 190
 ἐνάτηρ, 233, 234
 Ἐνοδία, Ἀρτεμις, 291
 Εὐτεκνος, Δητώ, 291

Ζεὺς Ἰδαίος, 236
 Ζυγία, Ἡρα, 32

Θάλαμος, 294
 θάλασσα Ἐρεχθίς, 325
 θυμελική σύνοδος, 284
 θύρα = sacred doorway. 181

Ἰδαίος, Ζεὺς, 236
 ἰδίου λόγου, ἐπίτροπος Αἰγύπτου, 291
 ἱερὰ θυμελική καὶ ξυστική σύνοδος, 284

Καλλίνικος, Ἡρακλῆς, 291
 κλεισοῦρα, 69 ; κλεισουράρχης, 75
 Κόειντος = Quintus, 229
 κύανος χυτός, 194

Λάβρυς, 109, 268 f.

Μέσαυλος (μέταυλος) θύρα, 294, 300 f.
 μνης for μνήμης, 233

Ξυστική σύνοδος, 284

Πανάμαρος, Πανάμωρος, 109
 Παρθενία, Ἡρα, 32
 παστάς, 294
 Περγαίη, Ἀρτεμις, 285
 Πολιεὺς, Σάραπς, 275, 276
 προστάς, 294
 προσώπου. ἐκ, 75
 πύργος of Greek house, 299

Σέραπς, θεὸς μέγιστος, 279
 σῆμα ? or σχῆμα ! τριαίνης, 326
 Σιταπνέζουαν, 280
 συνέφηβοι in Egypt, 286
 σχῆμα τριαίνης, 325

Τελεία, Ἡρα, 32
 Τρεβούατος, 280
 τουρμάρχαι, 74
 Τυρνια, Parthian satrapy, 29

Υλάτης, Ἀπόλλων, 291

Φωσφόρος, Ἀρτεμις, 291

Χιλιόκωμον πεδίον, 55

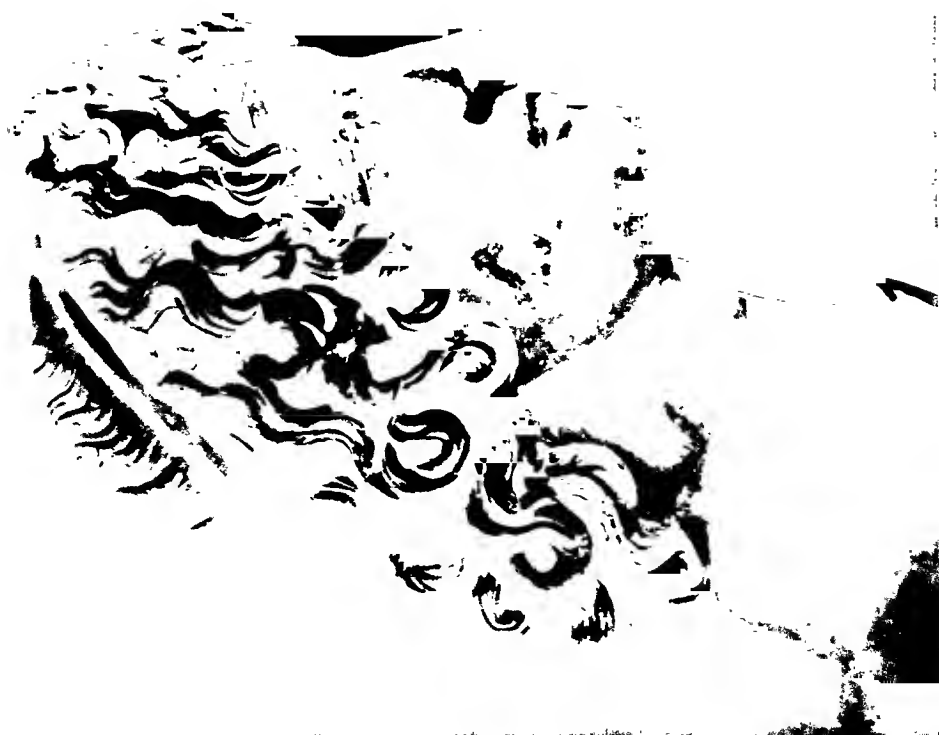
Ω for O on Alkimachos-vases. 4



HERM AT CHATSWORTH.



HEAD OF ALEXANDER AT CHATSWORTH.



HEAD OF ALEXANDER AT CHATSWORTH.



HEAD OF HERMES AT CHATSWORTH.



HEAD OF HERMES AT CHATSWORTH.



STATUE OF APOLLO AT CHATSWORTH.



PORTRAIT STATUE AT CHATSWORTH.



PORTRAIT GROUP AT CHATSWORTH.



BUST AT CHATSWORTH.

Handwritten cuneiform script, line 1.

Handwritten cuneiform script, line 2.

Handwritten cuneiform script, line 3.

Handwritten cuneiform script, line 4.

Handwritten cuneiform script, line 5.

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